



# 2022 PERSON COUNTY COMMUNITY HEALTH ASSESSMENT March 2023



Photo provided by the Person County Health Department

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Source: North Carolina Institute of Medicine. Healthy North Carolina 2030 Scorecard. Available at <a href="https://schs.dph.ncdhhs.gov/units/ldas/hnc.htm">https://schs.dph.ncdhhs.gov/units/ldas/hnc.htm</a> .....	61
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## ACKNOWLEDGMENTS

This document would not have been possible without the cooperation of the Person County Community Health Assessment Team. This team assisted with the development, distribution, and collection of the community health survey. They also assisted with the collection of additional local data. Team members served as liaisons to other community partners. Their input and expertise were also provided throughout other phases of the community health assessment process. Members of the 2022 Person County Community Health Assessment Team included:

- Jennifer Brown (Family & Consumer Science Agent, NC Cooperative Extension)
- Froncello Bumpass (Public Housing Manager, Roxboro Housing Authority)
- Elliot Clark (Regional Director of Community Relations, Vaya Health)
- Janet Clayton (Health Director, Person County Health Department)
- LeighAnn Creson (Quality Assurance Specialist, Person County Health Department)
- Jennifer Daye (Outreach/Marketing Coordinator, Person Family Medical Center, Inc.)
- Kelly Foti (Executive Director, Person County Partnership for Children)
- Ollie Jeffers (Community Volunteer)
- Richard Johnson (Public Health Educator, Person County Health Department)
- Beverly Murphy (Vice President of Administrative Services/CFO, Piedmont Community College)
- Ed Priestaf (Pastor, Long Memorial United Methodist Church)
- Tracy Scruggs (Director of Teacher Support & Public Information, Person County Schools)
- Paola Stone (Foreign Language Interpreter, Person County Health Department)
- Tammy Tuck (Director, Growth & Outreach, Person Memorial Hospital)

Thank you also to our community for completing surveys and contributing information in other ways.

Independent public health consultant Annika Pfaender provided secondary data collection and analysis, primary data analysis, and report development services for this report.

The community health assessment process, source document, and final report were made possible by financial contributions from the Person County Health Department.

# EXECUTIVE SUMMARY

## VISION STATEMENT

To assess where we are, to know where we need to be, and to meet the needs of our community.

## LEADERSHIP

The Person County Health Department coordinated the 2022 Community Health Assessment (CHA) process with a CHA Team and support from an independent consultant. In larger counties, where community partners are more plentiful and not as frequently exhausted by service on multiple committees, it may be more feasible to establish both an advisory group and a work group for the CHA process. However, this is not reality for most small, rural counties such as Person County. Therefore, one CHA Team was formed that served simultaneously in advisory and working capacities.

CHA Team Members (members of Healthy Personians marked with an asterisk)	
Name	Agency
Jennifer Brown*	NC Cooperative Extension, Family & Consumer Science Agent
Froncello Bumpass	Roxboro Housing Authority, Public Housing Manager
Elliot Clark	Vaya Health, Regional Director of Community Relations
Janet Clayton*	Person County Health Department, Health Director
LeighAnn Creson*	Person County Health Department, Quality Assurance Specialist
Jennifer Daye*	Person Family Medical Center, Inc, Outreach/Marketing Coordinator
Kelly Foti*	Person County Partnership for Children, Executive Director
Ollie Jeffers*	Community Volunteer
Richard Johnson*	Person County Health Department, Public Health Educator
Beverly Murphy*	Piedmont Community College, Vice President of Administrative Services/CFO
Ed Priestaf	Long Memorial United Methodist Church, Pastor
Tracy Scruggs	Person County Schools, Director of Teacher Support & Public Information
Paola Stone*	Person County Health Department, Foreign Language Interpreter
Tammy Tuck*	Person Memorial Hospital, Director, Growth & Outreach

## COLLABORATORS

Collaboration between Person County Health Department, the Public Health Consultant, and local partners made this assessment possible. Many partners spent numerous hours attending team meetings, collecting local data, promoting, and distributing both the initial community health survey and then later the priority setting survey, and assisting LeighAnn Creson, the Project Facilitator, in various ways. A collective list of the key partners in the 2022 CHA process in Person County includes:

Collaborating Agencies	Number of Partners
Public Health Agency	4
Hospital/Health Care-related agencies	2

Behavioral Health services (including substance abuse)	1
Dental Health Providers	0
EMS Provider	0
Educational (including public school system)	2
Public Housing Authority	1
Faith Organizations	1
Community Organization (advocacy, senior center, food banks, transportation etc.)	2
Social Services	0
Local government	0
Food banks	0
NC Cooperative Extension	1
Public Safety	0
Public Library	0
Chamber of Commerce	0

## CONTRACTED SERVICES

Our county received support from Annika Pfaender, independent public health consultant, for the 2022 CHA. In partnership with staff from the Person County Health Department, she assisted in the development of a community health survey instrument and conducted the survey analysis; gathered secondary data from public domain sources; compiled data provided by local sources; analyzed de-identified data provided by the local hospital; prepared a summary presentation of secondary and primary data findings to be disseminated as part of the prioritization process; and prepared this document.

## THEORETICAL FRAMEWORK/MODEL

The Ecological Model was used as a framework throughout the process of developing the 2022 Person County Community Health Assessment. The Ecological Model addresses the interaction between, and interdependence of, factors within and across all levels of a health issue. This model recognizes multiple levels of influence on health behaviors, including individual factors, interpersonal factors, institutional and organizational factors, community factors, and public policy factors all across the continuum of care.

## COLLABORATIVE PROCESS SUMMARY

Locally, our approach to the community health needs assessment process is community-wide and multi-faceted. Our county included community input and engagement through: (1) Partnership in conducting the CHA process; (2) Through primary data (survey) collection efforts; (3) Through secondary data collected from community partners; (4) In the identification and prioritization of health issues. Community engagement will remain a focus as we move forward to the collaborative action planning phase of the community health improvement process. Partners and



stakeholders with current efforts or interests related to priority health issues will continue to be engaged. We also plan to collaborate with our partners to help assure programs and strategies in our community are developed and implemented with community members and partners.

The collaborative process began in March 2022 with the development of the community health survey. The CHA Team met through June and resumed meeting in October. The prioritization process took place in November and December 2022 and this CHA report will be available to community partners and the public after March 6, 2023.

## KEY FINDINGS

Person County is a land-locked county located in the Piedmont Region of north-central NC and is part of the Durham-Chapel Hill Metropolitan Statistical Area. As part of the metropolitan area, it is home to workers who often commute to lucrative jobs in Durham, Orange, and Wake counties. It was home to an estimated 39,500 people in 2020 and is diverse in proportions similar to the state as a whole: 67% white, 25% black/African American, and 4% Hispanic.

A noteworthy aspect of the Person County population is its age. The median age in the county is 43.6 years, nearly five years “older” than the population of NC as a whole. The population of citizens over the age of 65 is projected to grow 23% by 2050 while the total population of the county is projected to remain level. It will be critical for the community to monitor the growth of this population to address its needs, since this segment of the population tends to consume health and human services at higher rates.

Although the economy of Person County includes a variety of jobs in electrical, textile, administrative, manufacturing, aerodynamics, food processing, aluminum, and paper products, 18% of the county’s workers are employed in retail trade, a low-paying sector with many part-time employees and limited benefits. The average weekly wage across all sectors in 2021 was \$930, \$350 lower than the state average. Despite the relatively lower weekly wages, median family and household incomes rose steadily between 2015 and 2020. While unemployment increased abruptly in 2020 due to the Coronavirus (COVID-19) it had fallen to 4.1 by June 2022. The impacts of inflation, supply chain disruptions, and nationally rising housing prices are not yet reflected in the economic data examined as part of this CHA.

Despite an economy that is improving nationally and locally, poverty remains significant in Person County, especially among minorities and children. The overall 100% poverty rate in Person County in 2020 was 16.3%, higher than in NC as a whole. However, 23% of African American’s were living in poverty, the rate among American Indian/Alaska Natives was 38.4%, and the rate among Hispanic/Latinos was even

higher at 58.4%. Among children in the county under the age of 5, the poverty rate was 33% in 2020.

Poverty can diminish all aspects of quality of life including health. The population in poverty is even more at risk for poor health outcomes if its members do not have health insurance. In 2020, an estimated 12% of the Person County population between ages 0-64 lacked health insurance of any kind. Children ages 0-18 fared better, with only 6% uninsured, due largely to increasing numbers of individuals enrolling in Medicaid and NC Health Choice.

Even with health insurance coverage, the cost of healthcare remains a leading concern among Person County residents. High costs and inadequate insurance coverage were the most common barriers reported by community health survey respondents who could not get needed dental care or prescription medications in the past year. With healthcare provider-to-population ratios that are lower compared to NC, it is not surprising that the most common reason respondents couldn't access necessary medical care was that it took too long to get an appointment. The aging of the healthcare workforce will only exacerbate access issues: 23% of physicians and 40% of dentists in Person County were over the age of 65 in 2021.

## Health in Person County

Life expectancy in Person County has not changed much in 30 years. For a person born in 2018-2020, the overall life expectancy was 75.9 years, compared to 75.5 years for a person born in 1990-1992. The most significant improvement occurred among males, for whom life expectancy improved from 70.6 years in 1990-1992 to 72.9 years in 2018-2020. Unfortunately, life expectancy for females decreased from 80.4 years in 1990-1992 to 79.0 years in 2018-2020.

Comparison of Person County CHA health data over the past two decades has identified significant improvement in certain health parameters, such as the leading causes of death. Since 2001-2005, mortality rates in the county have declined overall for seven leading causes of death. However, mortality rates rose for unintentional injuries, diabetes, Alzheimer's disease, kidney diseases, septicemia, and chronic liver disease and cirrhosis. Among these causes of death, diabetes and kidney diseases are disproportionately fatal in the Person County African American community, where the 2016-2020 mortality rates were more than double the mortality rate for whites. Despite the long-term decreases in mortality rates for heart disease, cancer, chronic lower respiratory diseases, suicide, and motor vehicle injuries, Person County mortality rates for those causes of death remained higher than the comparable state rates in 2016-2020.

Among the lifestyle factors contributing to chronic diseases like heart disease, diabetes, and kidney diseases, overweight and obesity are perhaps the most

important. According to the CDC, average prevalence of adult obesity in the county from 2006 through 2019 was 25%. This prevalence of adult overweight/obesity was corroborated by local data. More than half (52%) of respondents to the 2022 Person County Community Health Survey self-reported having received a medical diagnosis of overweight/obesity, a higher proportion compared to the 2014 and 2018 surveys. Respondents identified obesity/overweight as the sixth most important community health problem in 2022. They also recognized lack of exercise and poor eating habits as important unhealthy behaviors in the Person County community.

Between 2001-2005 and 2016-2020, cancer mortality rates in Person County decreased for the four most common site-specific cancers: lung, colorectal, prostate and breast. Between 2001-2005 and 2016-2020 incidence rates decreased for lung, prostate, and colorectal cancer and increased for breast cancer. Among respondents to the 2022 Community Health Survey, cancer ranked first on the list of leading health concerns, with more than two-thirds of respondents selecting it from a list of 20 health problems.

While some measures of maternal and infant health in Person County have improved over time, such as the teen pregnancy rate, disparities remain an issue, and the county tends to fare poorly compared with North Carolina. While the pregnancy rate for teens (girls ages 15 through 19) fell by 64% between 2005 and 2020, the rate remains higher compared to the state average. The frequency of high parity, short-interval, low-weight, and pre-term births in the county exceeded the state averages in 2020. Utilization of early prenatal care in Person County (68.5%) remains lower than the state average (73.1%) and has not improved significantly over time. Just over 11% of births in 2020 were to mothers who smoked during pregnancy, higher than the state average of 7%. The overall infant mortality rate in Person County increased from 7.4 deaths per 1,000 live births in 2012-2016 to 9.5 in 2016-2020. Most infant deaths in Person County occur among Black non-Hispanic residents.

## PERSON COUNTY POPULATIONS AT RISK FOR POOR HEALTH OUTCOMES

The poor, the uninsured, minorities, and males in Person County are at greater risk for poor health outcomes than their wealthy, insured, white, and female counterparts. Other vulnerable populations include people living in the rural parts of the county, especially those with limited transportation options. At-risk populations associated specifically with the priority health problems selected in Person County will be discussed separately.

## PERSON COUNTY HEALTH PRIORITIES

The Person County CHA Team used the results of extensive secondary data collection and analysis and a community health survey to establish community health priorities. The contracted consultant presented the results, from both information gathering activities, to an invited audience of CHA Team members in October 2022. The

presentation was shared with collaborating team members at partner agencies, who then voted individually on their preferred, evidence-based priorities. The CHA Team tabulated the results.

The following were established as Person County's health priorities for the next four years 2023-2026):

1. Overweight & Obesity
2. Substance Abuse

## NEXT STEPS

Within six months of the completion of Person County's CHA, a workgroup consisting of community partners will collaborate to develop a Community Health Improvement Plan (CHIP) for each of the two selected health priorities. CHIPs will focus on meeting the unmet needs of at-risk groups and will be aligned with Healthy North Carolina 2030 focus areas, as well as standards set forth by NC Local Health Department Accreditation and the Department of Health and Human Services/Division of Public Health Consolidated Agreement. They will include evidence-based multilevel interventions targeting health behavior, the physical environment, social and economic factors, and/or clinical care and be both short-term and long-term in nature.

Copies of this CHA report will be made available on the Person County Health Department website: go to [www.personcountync.gov](http://www.personcountync.gov) and find the Health Department under the Government tab/alphabetical listing. Hard copies will be available upon request by calling the Person County Health Department at 336-597-2204.

# THE COMMUNITY HEALTH ASSESSMENT PROCESS

## OVERVIEW

Local public health agencies in North Carolina (NC) are required to conduct a Comprehensive Community Health Assessment (CHA) at least once every three or four years. The CHA is a requirement in the consolidated agreement between the NC Division of Public Health (NCDPH) and the local public health agency. Furthermore, a CHA is required for local public health department accreditation through the NC Local Health Department Accreditation Board (G.S. § 130A-34.1).

In communities where there is an active Healthy Carolinians coalition, the CHA partnership also usually includes that entity. Healthy Carolinians is “a network of public-private partnerships across North Carolina that shares the common goal of helping all North Carolinians to be healthy.” The members of local coalitions are representatives of the agencies and organizations that serve the health and human service needs of the local population, as well as representatives from businesses, communities of faith, schools, and civic groups. In Person County, the local Healthy Carolinians coalition is *Healthy Personians* (HP).

The community health assessment, which is both a process and a document, investigates and describes the current health status of the community, what has changed since the last assessment, and what still needs to change to improve the health of the community. The *process* involves the collection and analysis of a wide range of data, including demographic, socioeconomic and health statistics, environmental data, and professional and public opinion. The *document* is a summary of all the available evidence and is a useful data resource until the next assessment. The completed assessment serves as the basis for prioritizing the community's health needs and culminates in planning to meet those needs.

The CHA Project Facilitator worked with an independent public health consultant to develop a multi-phase plan for conducting the assessment. The phases included: (1) a secondary data research phase to identify, collect and analyze secondary demographic, socioeconomic, health, hospital, and environmental data; (2) a primary data research phase to analyze data collected via a community health survey, available online and in hard copy in English and Spanish; (3) a data synthesis and analysis phase; (4) a period of data reporting and discussion among the project partners; and (5) a prioritization and decision-making phase. Upon completion of this work, the assessment partners and the community have the tools they need to develop plans and activities that will improve the health and well-being of the people living in Person County. The consultant provided direct technical assistance for phases 1, 2, 3 and 4. To assure project compliance with NCDPH guidelines and requirements, the CHA coordinator and the consultant utilized supporting tools available on the website, <https://publichealth.nc.gov/lhd/>.

## PROCESS

Health department staff recruited members for a team to guide the CHA process. In larger counties where community partners are more plentiful and not as frequently exhausted by service on multiple committees it may be more feasible to establish both an advisory group and work group for the Community Health Assessment (CHA) process. However, this is not the reality for most small, rural counties such as Person County. Therefore, one CHA Team was formed that served simultaneously in advisory and working capacities. Efforts of the CHA Team were coordinated by a Project Facilitator, who was the Person County Health Department's Quality Assurance Specialist. Factors taken into consideration when assembling partners included: (1) diversity and having a representation of county demographics, (2) previous involvement in the CHA process, (3) a vested interest in public health, (4) expertise in various fields that can impact health, (5) representation from community members, (6) involvement in the Healthy Personians Partnership, (7) partner reputation and reliability, and (8) partner connections within the community.

The initial CHA Team meeting/orientation was held in March 2022. Attendees were provided a brief history of the CHA in Person County, oriented about the phases of the process along with a timeline for each phase and made aware of the expectations of team members. At the conclusion of the meeting, team members began work on editing a draft of the community health survey as prepared by the facilitator and the consultant. Team meetings were held as needed with communication in the interim via email and phone. The CHA Team worked to promote the community health survey from May 2022 until July 2022.

By mid-July 2022, 749 community health surveys had been collected and the public health consultant analyzed the survey results. In October 2022, the consultant provided a summary of secondary data findings and results from the community health survey; that presentation was also distributed electronically to the CHA Team. A priority setting survey was conducted by the CHA Team in November and December 2022 and the results of that survey were tabulated to establish health priorities for the next four years.

## DATA COLLECTION PROCESS

The consultant's primary tasks were to identify, collect and analyze secondary data, and to analyze the results of primary data collection activities conducted by the Person County CHA Team.

Because in any community health assessment it is instructive to relate local data to similar data in other jurisdictions, Person County data is compared to like data describing the state of NC, as well as data from Bladen County, NC. In some cases, Person County data is compared to US-level data or other standardized measures.



Where appropriate, trend data was used to show changes in indicators over time, at least since the previous Person County CHA in 2018, but often further back than that. Throughout the data collection process, attention was given to identifying at-risk and vulnerable populations when the data was disaggregated according to age, gender, or race/ethnicity. The consultant made every effort to obtain the most current data available at the time.

In order to learn about the specific factors affecting the health and quality of life of Person County residents, the consultant tapped numerous readily available secondary data sources. For data on demographic, economic and social characteristics, sources included: the US Census Bureau; NC Office of State Budget and Management; NC Department of Commerce; NC Department of Public Instruction; NC Department of Justice; NC Department of Administration; NC Department of Transportation; NC Medicaid Division of Health Benefits; NC Division of Child Development; NC State Board of Elections; NC Division of Health Services Regulation; and the Cecil B. Sheps Center for Health Services Research.

The main source of secondary health data was the NC State Center for Health Statistics (NC SCHS), including its County Health Data Books, Vital Statistics, and Cancer Registry. Other health data sources included: NC Division of Public Health (NCDPH); NC Division of Mental Health, Developmental Disabilities and Substance Abuse Services; and the NC Institute of Medicine, among other *public domain* sources. Other important *local* health data sources included the Person County Health Department and the Person County Department of Social Services. Definitions of the health statistics terminology used in this report are included in *2022 Person County CHA Appendix 1: Glossary of Abbreviations and Health Data Definitions*.

The hospital in Person County—Person Memorial Hospital—provided de-identified data detailing demographic characteristics and ICD- and DRG-coded diagnoses of the patient population discharged in calendar years 2019, 2020, and 2021 from the emergency department and from inpatient hospitalization. The consultant worked with the hospital to assure that the data provided preserved the confidentiality of individual patients.

Secondary environmental data were gathered from public domain sources including the US Environmental Protection Agency, NC Department of Environmental Quality, and the Section of Environmental Health in the NC Division of Public Health (NCDPH).

It should be noted that as is typical in all time-limited activities such as community health assessment, all secondary data were mined at points in time in the recent past and may not represent present conditions. Numbers, entity names, program titles, etc. that appear in the consultant's report may no longer be current.

The community health survey was conducted primarily via Survey Monkey™ but was supplemented by hard copy surveys distributed to some population groups that could not easily access the Internet. In the summer of 2022, 749 surveys were collected and analyzed by the public health consultant. Since the survey was collected via convenience sampling, some groups are typically over- or under-represented. For example, the 2022 survey sample was overwhelmingly female, older, more highly educated, and wealthier than the general population. While the unique primary data collected via the survey remains an important part of the CHA process, results should be interpreted with an awareness that the survey sample does not represent the full population of Person County. Survey results are interspersed throughout this report. The survey instrument used is included as *2022 Person County CHA Appendix 2: Community Health Survey Instrument*.

The consultant's PowerPoint presentation, containing an abridged summary of the secondary data and community health survey is attached as *2022 Person County CHA Appendix 3: Consultant's Presentation*. The priority setting survey distributed among the community to help determine the priorities is also provided as *2022 Person County CHA Appendix 4. Priority Setting Survey*.

All secondary data, including indicators that are not discussed in full in this report, as well as summary results from the 2022 Person County Community Health Survey and a summary of hospital data were compiled into a robust Data Workbook by the Public Health Consultant. That workbook can be made available to members of the CHA Team or other partners upon request in order to support their efforts in the community.

# GENERAL DEMOGRAPHICS

## COUNTY DESCRIPTION AND HISTORY

Person County is a land-locked county located in the Piedmont Region of north-central NC. It is bordered to the west by Caswell County, NC, to the east by Granville County, NC, to the south-southeast by Durham County, NC, and to the south-southwest by Orange County, NC. Virginia (specifically Halifax County, VA) lies along the county's northern border.

Person County encompasses a land area of approximately 392 square miles and a water area of 12 square miles. Most of the county is rolling hills divided by farmland and forest. The county is divided geopolitically into nine township districts: Allensville, Bushy Fork, Cunningham, Flat River, Holloway, Mount Tirzah, Olive Grove, Roxboro, and Woodsdale Townships. The City of Roxboro is the county seat and is the only incorporated municipality in the county. Hyco Lake and Mayo Reservoir, both located in the northern part of the county, are used to support commercial electricity generation as well as for recreation. Lake Roxboro, located near the county's western border with Caswell County, serves as a source of community drinking water.



Source: [https://www.carolana.com/NC/Counties/person\\_county\\_nc.html](https://www.carolana.com/NC/Counties/person_county_nc.html)

Person County's primary ground transportation routes are two US Highways (501 and 158) and three NC Highways (157, 57, and 49). No Interstate highways traverse the county, but I-85 is located approximately 30 miles to the east. Rail service consists primarily of switching services for the Norfolk Southern Railroad along its Roxboro-South Boston (VA) route. No passenger air services are available in the county; two regional airports (Raleigh/Durham International Airport, 45 miles to the southeast) and Piedmont/Triad International Airport in Greensboro, 60 miles to the southwest) meet most residents' air travel needs. Business and general aviation needs are met locally at the Raleigh Regional Airport at Person County, where a corporate hangar has recently been added (1). The county has no regularly scheduled long-distance passenger bus service. The nearest commercial bus stations are Greyhound Terminals in Durham, NC and Danville, VA. Person Area Transportation System (PATs) is a public transportation service that operates as a branch of the Person County Government. PATs provides transportation for various human service agencies, the elderly, people

with disabilities and the general public of Person County to anywhere in Person County for a fee (2).

Residential growth in the county today is located primarily in the lakes region in the north, and in the southern portion of the county (where growth is at least partly due to proximity to the employment mecca of the Research Triangle Park in Durham and Wake Counties. The present-day economy of Person County is dominated by electrical, textile, administrative, manufacturing, aerodynamics, food processing, automotive, aluminum and paper products. Diversification from traditional flue cured tobacco to include other modes of agriculture is underway (3).

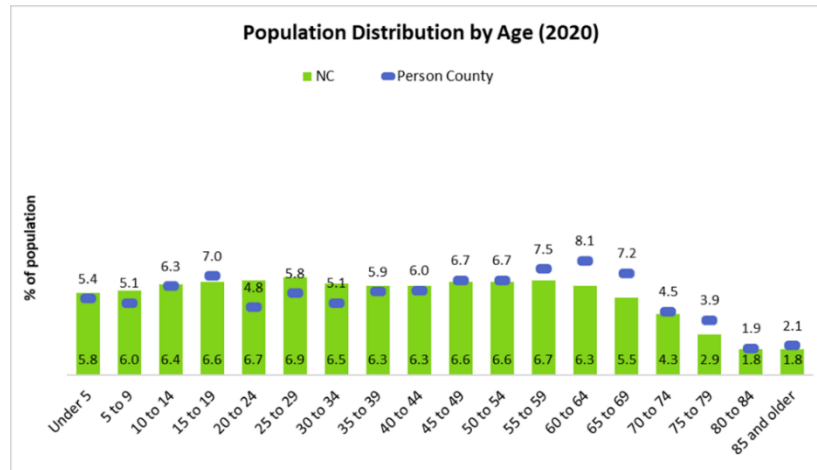
## DEMOGRAPHICS

According to the 2020 Decennial Census count, Person County is home to 39,097 people, slightly lower than the 2020 American Community Survey (ACS) estimate of 39,561. With a projected population of 39,334 by 2050, the size of the county is expected to remain level over the next three decades (4). Population change is a combination of births, deaths, and geographic mobility. The birth rate in Person County has remained relatively steady at around 10.6 since 2009-2013; on average, 420 births occur each year in Person County. Less than 4% of the county population had moved there from another county, state, or country in 2020.

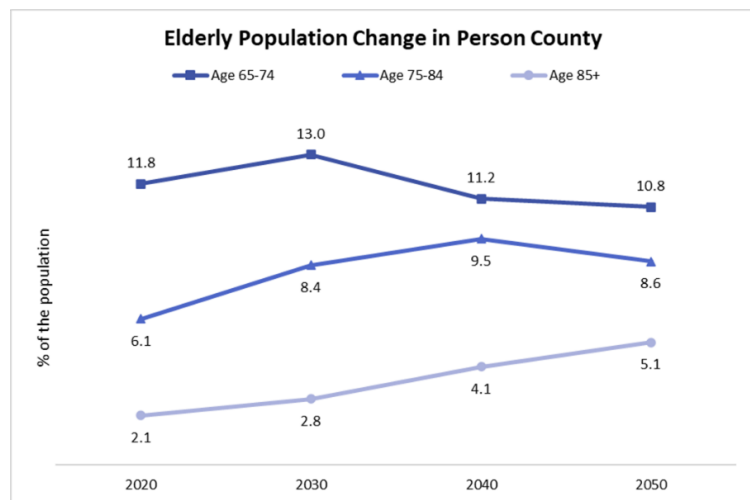
The Person County population is similarly diverse compared to the NC population overall: 67% white, 26% Black/African American, and 4% Hispanic/Latino; the comparable percentages for NC are 68% white, 21% African American, and 10% Hispanic/Latino (5).

Racial Distribution as a % of the Total Population (2020)	White	Black	AIAN	Asian	Other Race	Multiple Races	Hispanic/Latino
Person County	67.0	25.5	0.6	0.5	2.3	4.1	4.4
Bladen County	57.9	34.7	2.6	0.2	4.0	0.6	7.6
North Carolina	67.6	21.4	1.2	3.1	3.2	3.6	9.5

In 2020 the median age in the county was 43.6 years, nearly five years “older” than the median age of the population of NC as a whole (38.9). As the graph provided below demonstrates, compared to NC, the Person County population has higher percentages of residents over the age of 55 and lower percentages of residents in the 20-40-year-old age groups (6).

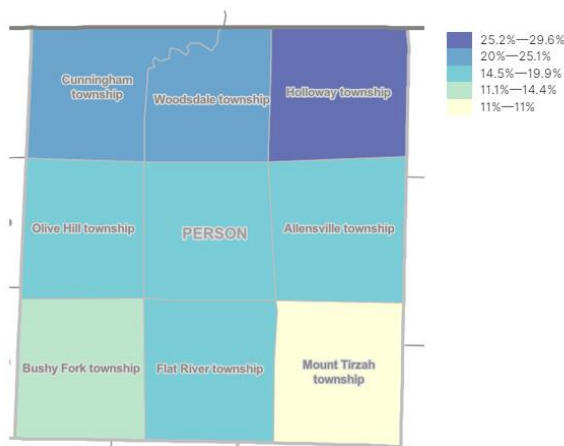


Exacerbating current concern about older segments of the population is the projected growth in the population over the age of 65. According to figures from the NC Office of State Budget and Management, the population of persons aged 65 and older in Person County could grow by 23% over the coming decades, from approximately 7,800 in 2020 to 9,650 by 2050. More specifically, while the population age 65-74 is projected to decrease by 8%, the population age 75-84 is projected to increase by 41% and the population over age 85 by 143% (7). The oldest adults can face unique challenges such as increased risk of falls, different patterns of health care utilization, more demanding and complicated long-term care needs, as well as transportation and mobility issues.

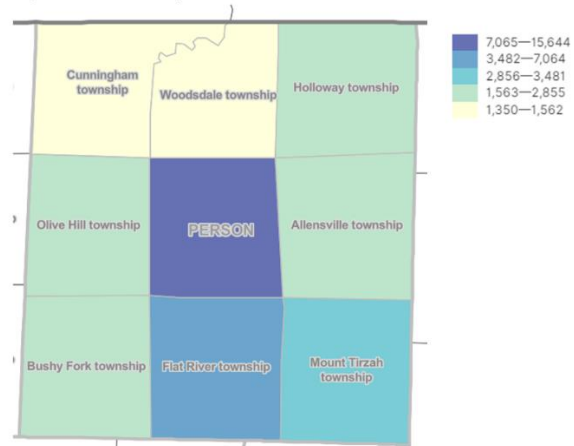


When looking at Person County townships, the population of the county is concentrated in the Roxboro (appears as PERSON on the Census Bureau-derived map) and Flat River townships. The population aged 65 and older is more dispersed, with the highest proportion of elderly residents living in the county's northern townships.

Percent of Population Aged 65 and Older, 2020 ACS Estimates



Population Distribution, 2020 ACS Estimates



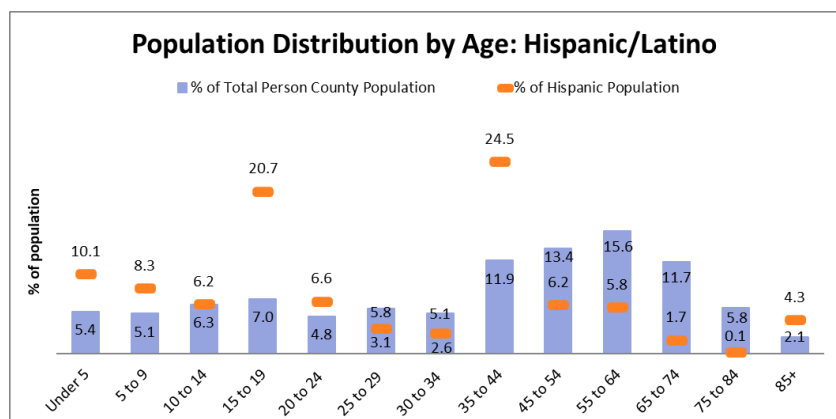
## OTHER POPULATIONS OF NOTE

Approximately 4% of Person County households, around 600, spoke a language other than English in 2020. Spanish was the most common language spoken and less than 1% of the non-English speakers in Person County would be considered linguistically isolated, meaning they speak English “less than very well” (8).

Person County was home to 2,555 veterans in 2020; 46% were over the age of 65 and 32% were aged 35-54, a higher proportion compared to Bladen County (19%), the state of NC (26%) and the US (23%) (9).

According to the 2020 ACS, 20% of the Person County population (or 7,836 individuals) was living with a disability, higher than North Carolina (13.4%) and Bladen County (18.0%). Ambulatory difficulties were most common (10% of the population) followed by cognitive or independent living difficulties (each 9%). Approximately 4% of the county population had a hearing difficulty, 4% had a vision difficulty, and 4% had a self-care difficulty (10).

Although those identifying as Hispanic/Latino comprise less than 5% of the Person County population, it is important to note the Hispanic/Latino population skews significantly younger compared to the total population. While 24% of the Person County population is under the age of 20, 45% of the Hispanic population is younger than 20 (11).



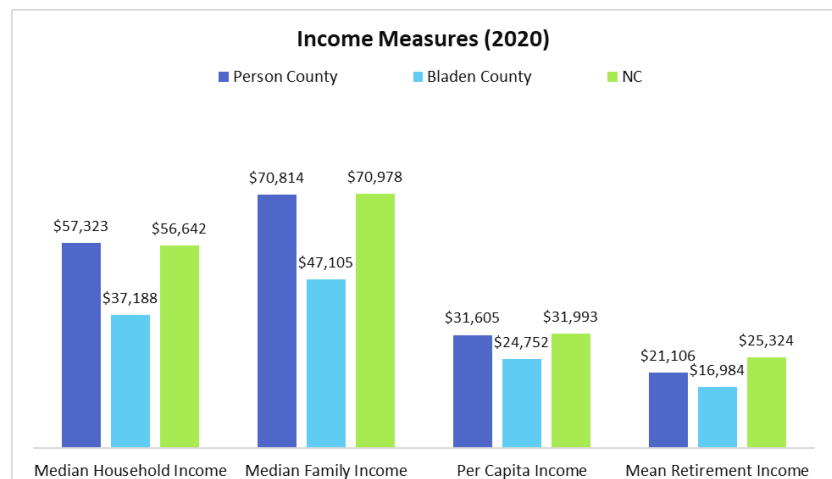


## ECONOMIC STABILITY

The NC Department of Commerce annually ranks the state's 100 counties based on economic well-being and assigns a Tier Designation, where the 40 most distressed counties are Tier 1, the next 40 are Tier 2, and the 20 least distressed are Tier 3. Unemployment rate, median household income, population growth, and poverty rate are the primary measures used to calculate the rankings. In 2022, Person County had a Tier 2 designation, and they were given that same ranking in 2023 (12). With this designation, Person County is eligible for different economic incentives to prospective businesses compared to its Tier 1 peer Bladen County.

### INCOME

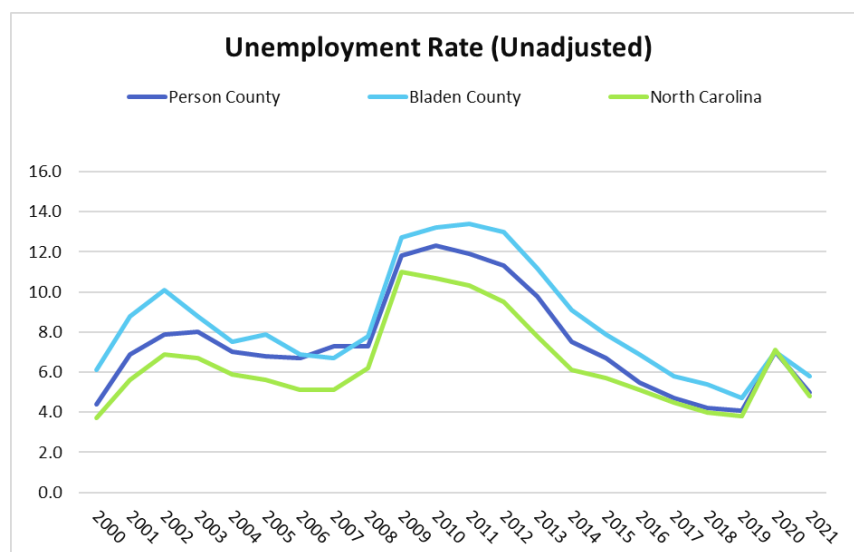
Person County income measures, as presented in the chart below, are similar compared to the state and higher than in Bladen County. The *median household income* increased from \$42,105 in 2015 to \$57,323 in 2020. The *median family income* rose from \$51,122 in 2015 to \$70,814 in 2020. The estimated 2020 *per capita personal income* in Person County increased from \$21,148 in 2015 to \$31,605 in 2020. *Mean retirement income* rose by \$4,400 between 2015 and 2020, though it was \$4,000 lower than NC for 2020 (13).



### EMPLOYMENT

In 2021, the sector in Person County that employed the largest percentage of the workforce (18%) was Retail Trade, with an average weekly wage of \$533; statewide, the average weekly wage in this sector was \$680. The retail trade sector typically includes many part-time workers, and many employers do not provide health benefits. The second-largest proportion of the workforce was employed in the Manufacturing sector (15%) at an average weekly wage of \$1,131, lower compared to the NC average wage of \$1,267. The third largest sector was Health Care and Social Assistance, employing 12% of the Person County workforce and paying a weekly wage of \$963, lower than the NC average of \$1,135. In 2021, the average weekly wage across all employment sectors was \$930 in Person County, \$352 less than the average weekly wage per worker statewide (\$1,282) (14).

The unemployment rate in Person County follows the same general pattern as Bladen County and the state. In 2021, the Person County unemployment rate was 5.0, higher than NC (4.8) and lower than Bladen County (5.8). The abrupt rise in the unemployment rate in 2020 is due to the COVID-19 pandemic. The unemployment rate continued to decrease through the spring of 2022 and by June 2022 the unemployment rate was 4.1 in Person County and across the state (15).

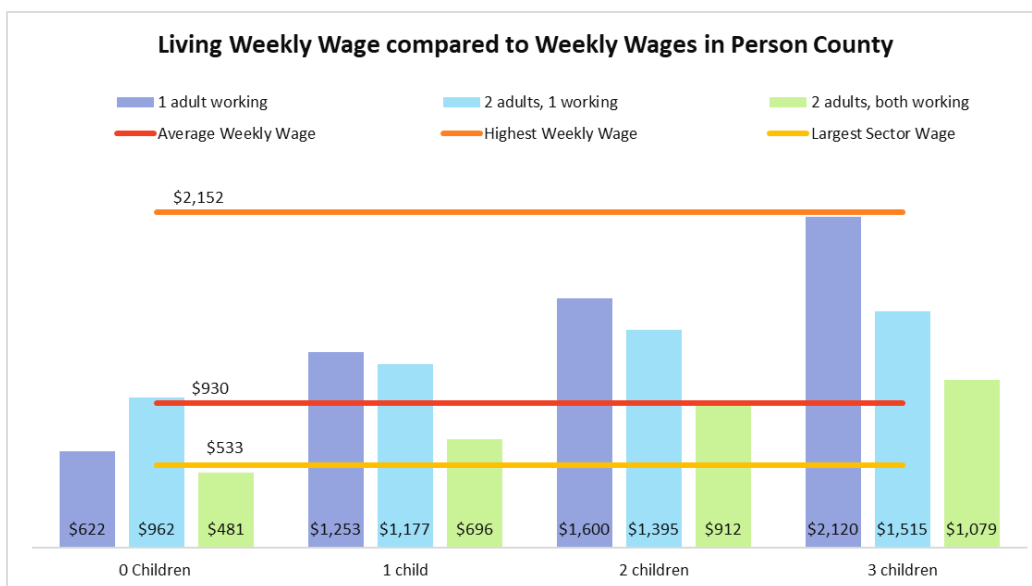


## Living Wage

A researcher in the Department of Urban Studies and Planning at the Massachusetts Institute of Technology has produced a Living Wage Calculator. "The living wage is the minimum income standard that, if met, draws a very fine line between the financial independence of the working poor and the need to seek out public assistance or suffer consistent and severe housing and food insecurity. In light of this fact, the living wage is perhaps better defined as a minimum subsistence wage for persons living in the United States." (16)

The bars in the chart below represent the estimated living wage for Person County, based on the number of adults bringing in income and the number of children in the family. The blue bars indicate what one working adult would need to make per week to earn what would be considered a living wage. The aqua bars are what two adults in a household, with only one working, would need to earn. And in green is what a household with two working adults, each earning the amount stated, would need to earn. The red line in the chart represents the average weekly wage earned by Person County employees in 2021 and the orange line is the highest weekly wage (earned by the 3% who are in the utilities sector) in 2021.

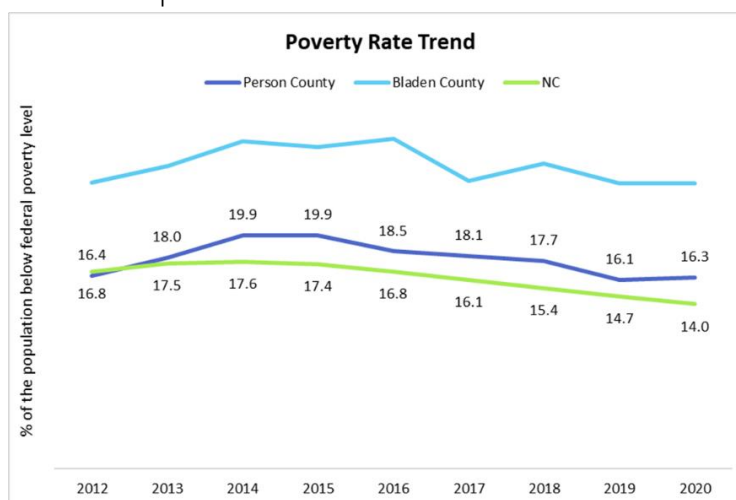
The average weekly wage earned by a Person County employee in 2021 (\$930) would be considered a living wage only for an individual with no children or a dual-income couple with only one or two children. It would not be enough for a single parent with one or more children, families with one working parent and 1 or more children, or a dual-earning family with three or more children (17).



## POVERTY

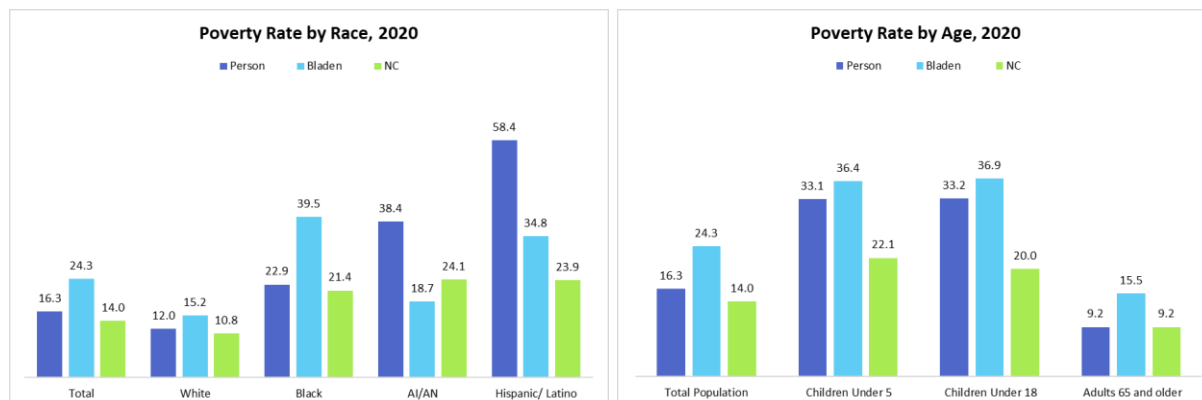
Poverty can diminish all aspects of quality of life including health. The population in poverty is even more at risk for poor health outcomes if its members do not have health insurance. The uninsured population in Person County will be discussed more fully in the Health Resources section of this report.

While poverty rates have decreased over time in all three jurisdictions presented in the chart, Person County demonstrated a higher poverty rate compared to NC since 2013. In 2020, 16.3% of the Person County population (an estimated 6,300 individuals) lived below the federal poverty line (18).



Hispanics and African Americans endure poverty at higher rates than their white counterparts. In 2020, the poverty rate among Hispanics in Person County (58.4) was

more than three times the rate among white residents (12.0). Youth under the age of 18 also have higher poverty rates: double the rate among the overall population (19).

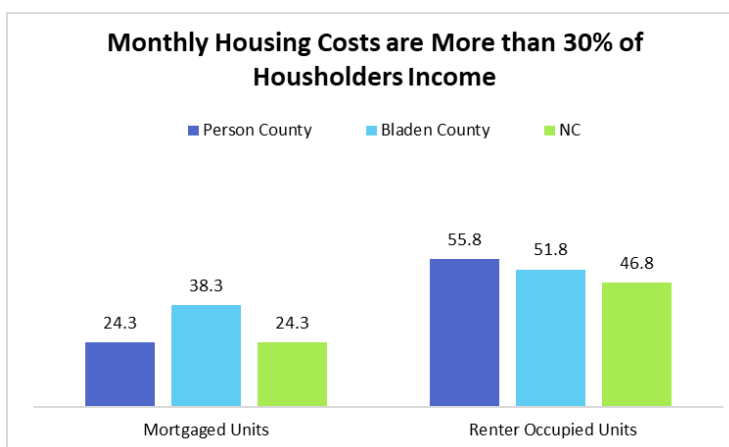


## HOUSING

In 2020, Person County residents were more likely to be homeowners compared to NC: 78% of housing units in Person County were owned and 22% were rented. Statewide, 34% of housing units were rented in 2020.

Housing is often the largest expense for a household. A benchmark often used to compare housing expense among communities is to cite the proportion of household units spending 30% or more of total household income on housing.

The estimated monthly mortgage cost increased in Person County, from \$1,075 in 2016 to \$1,143 in 2020, still well below the NC average of \$1,328. The percentage of owned housing units costing more than 30% of the owners' income decreased from 34% in 2016 to 24% in 2020, similar to NC and lower than Bladen County.



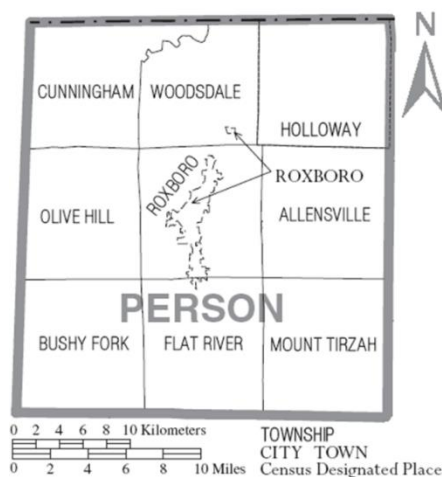
In 2020, the average gross rent in Person County was \$709 per month, lower than the NC average of \$932. Among rented units in Person County, 56% cost more than 30% of the renter's monthly income in 2020, the same as in 2016 (20).

## Housing Adequacy

Across Person County, 22% of occupied housing units both owned and rented, were mobile homes in 2020, nearly double the proportion statewide (12%). Twenty percent of housing units had been built before 1959 and 5% were heated with fuel oil, kerosene, coal, coke or other fuels. Only one housing unit in the county had no heating source, fewer than 10 lacked complete kitchen or plumbing facilities, and 189 had no telephone service (21).

When examining housing adequacy at the township level:

- Allensville township had the highest proportion of mobile homes (38%).
- Roxboro township had the highest proportion of older housing (30%).
- Cunningham township had the highest proportion of housing lacking telephone services (5%).
- Holloway township had the only units without complete plumbing facilities and Flat River township had the only housing units lacking complete kitchen facilities.
- Allensville township had the highest proportion of housing units using fuel oil, kerosene, coal, coke or other fuels (14%) (22).



## Community Health Survey: Income and Housing

The 2022 Person County Community Health Survey asked respondents to select the top five Social Issues that had an impact on quality of life in Person County. Low income /poverty ranked first on the list, as identified by 78% of respondents. Unemployment/under-employment ranked third on the list, with 57% of respondents selecting it. When asked to identify the five service issues that had the greatest impact on life in Person County, the affordability of housing ranked first, as selected by 58% of respondents.

Homelessness is of increasing concern among Person County survey respondents: while 10% selected homelessness as an important social issue in 2018, 28% selected it in 2022. And the lack of emergency housing shelters was identified as a service gap by 31% of respondents in 2022 (23). It is worth noting that this survey was conducted amidst an influx of news reports about rising rent, housing prices, and general inflation.

## Internet Access

Nearly 11% of Person County households did not have a computer in 2020, which is higher than the NC proportion (9%) and lower compared to Bladen County (14%). Almost 19% of Person County households did not have an internet subscription, higher than NC (16%) and lower than Bladen County (23%) in 2020. Approximately 11% of Person County households relied on a smartphone as their only computing device in 2020; 9% used only their cellular data plan for internet access, lower compared to NC (10%) and Bladen County (16%) (24).

## EDUCATION ACCESS & QUALITY

### EDUCATIONAL ATTAINMENT

According to ACS estimates, 12% of the Person County population over age 25 had less than a high school education, the same proportion as NC as a whole. Compared to the state rate of 26%, Person County had a higher proportion of residents who graduated from high school and sought no further education (36%). While 32% of the state population has a bachelor's degree or higher, 16% of the Person County population had attained at least a college degree (25).

According to data on adult literacy and numeracy from the National Center for Education Statistics, Person County adults are more likely to struggle with more complicated reading and mathematical tasks compared to NC and the US. An estimated 25% of Person County adults are at or below the lowest level of literacy, which requires adults to recognize basic vocabulary and determine meaning in order to locate a single, simple piece of information in a short text; 21% of NC and 22% of the US are at the same literacy level. Nearly 39% of Person County adults are at or below the lowest level of numeracy, which requires basic mathematical processes in concrete contexts, such as simple arithmetic, percentages, and special or graphical representations. Approximately one-third of NC and the US are at the same numeracy level (26).

### EARLY CHILDHOOD

As of July 2022, 19 licensed child care centers and 15 licensed family child care homes were operational in Person County. Among the 1,333 licensed slots in child care centers, 716 children were enrolled; no licensed slots are available during 2<sup>nd</sup> or 3<sup>rd</sup> shifts. As of July 2022, 96 children were enrolled among 256 total licensed slots in family child care homes, which do offer some 2<sup>nd</sup> and 3<sup>rd</sup> shift slots (27).

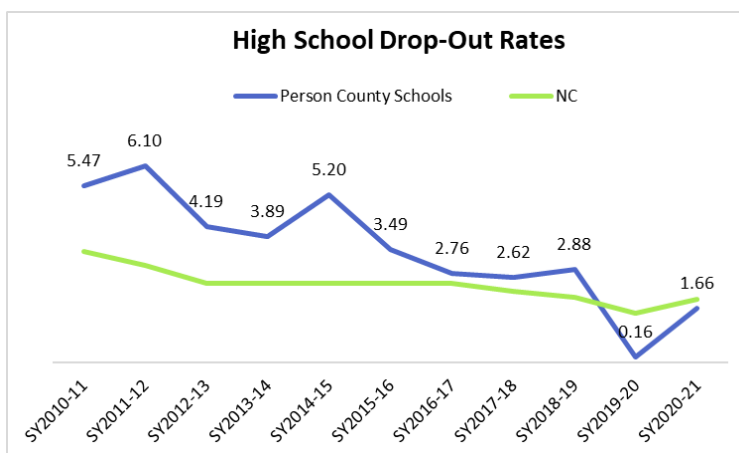


## PRIMARY AND SECONDARY EDUCATION

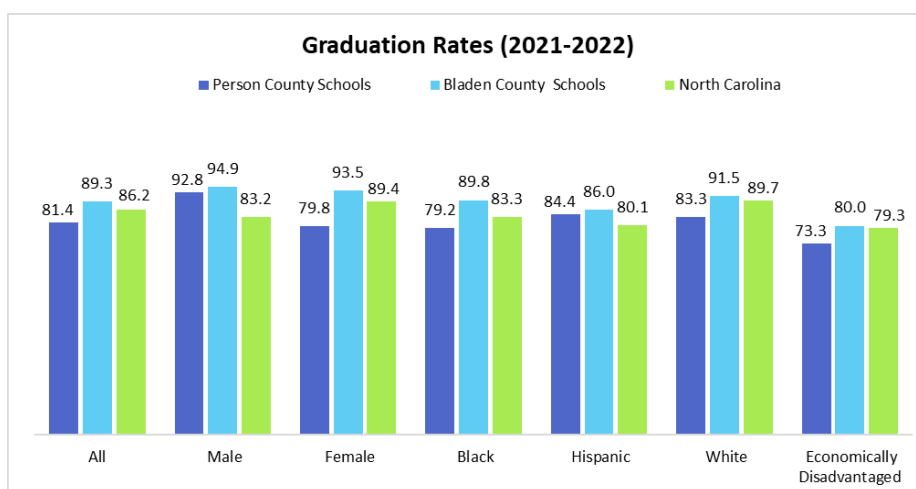
There were 11 public schools in the Person County school district: 7 elementary schools, 2 middle schools, and 2 high schools (including Person Early College for Innovation and Leadership) serving 4,400 students in School Year (SY) 2020-2021. Enrollment in Person County Schools has decreased steadily from a high of 5,812 in SY2006-07. There are two charter schools in the county, with 1,086 students enrolled in SY2020-21 (28). There are also two private schools in the county, both of them religiously affiliated, with approximately 110 students enrolled (29).

According to the NC Department of Public Instruction, a "drop-out" is any student who leaves school for any reason before graduation or completion of a program of studies without transferring to another elementary or secondary school.

Despite some variability on a yearly basis, the Person County high school drop-out rate has demonstrated a general decline over the past decade, though it was higher compared to NC over most of the period shown. Note that the 2019-2020 school year was impacted by COVID-19 related school closures in March 2020 (30).



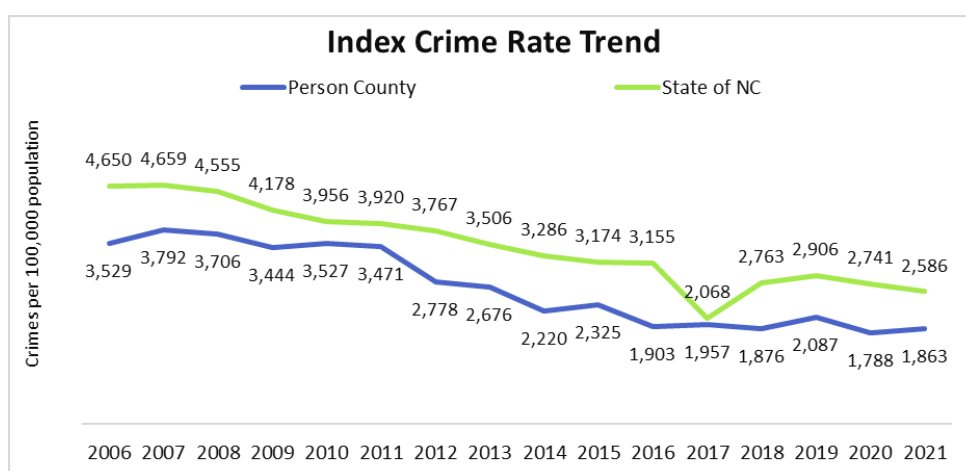
Some educators prefer to use graduation rate rather than drop-rate when discussing the proportion of students who finish/do not finish school, since it emphasizes success rather than failure. The four-year cohort graduation rates for subpopulations of students are shown in the following chart, which illustrates that the Person County graduation rates were higher compared to the state among males and Hispanic students and were lower for all other groups (31).



## SOCIAL AND COMMUNITY CONTEXT

### CRIME AND SAFETY

The NC Department of Justice catalogs data on *index crime*. Index crime is composed of *violent crime* and *property crime*. Violent crime includes murder, forcible rape, robbery, and aggravated assault; property crime includes burglary, larceny, arson, and motor vehicle theft and tends to account for a higher proportion of all crimes. The index crime rate in Person County has decreased steadily since 2007 and was lower than the comparable state rate throughout the period shown below. Due to the source's migration to a new crime reporting system, more recent detailed statistics are not available (32). In Person County, the most common violent crime reported tends to be aggravated assault, and the predominant property crime reported in every year cited was larceny (theft of property without the use of force) (33).

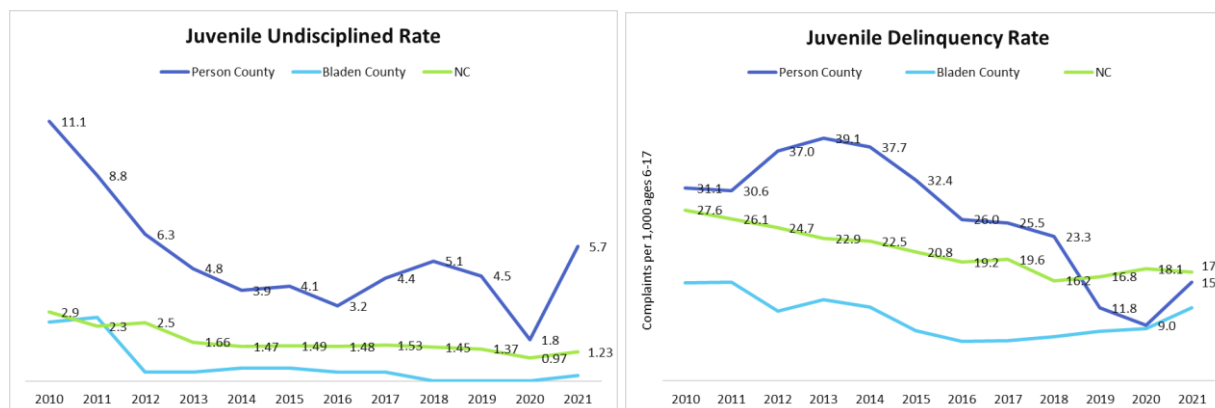


In 2017, the most recent year for which statistics are available, there were 191 arrests related to the sale/manufacture or possession of drugs in Person County. Among those arrests, 26% involved opium or cocaine, 61% involved marijuana, and 6% involved synthetic or other drugs. Statewide, 84% of drug-related arrests in the same period involved marijuana. There were 119 arrests for driving under the influence in Person County in 2017 (34). According to the NC State Bureau of Investigation, there were no methamphetamine drug lab busts in Person County in 2005 through 2021 (35).

### Juvenile Crime

Between 2010 and 2021, an average of 164 complaints of juvenile offenses were processed each year by the Juvenile Crime Prevention Council in Person County. The juvenile undisciplined rate in Person County increased in 2021 after a period of steady decline, though it was higher compared to NC over the entire period shown, below. Person County's juvenile delinquency rate increased in 2021 after steadily decreasing

since 2014; it has also been higher than NC since 2010. A juvenile is determined to be undisciplined if they committed offenses that would not be crimes if committed by adults (truancy, running away from home, ungovernable, or is regularly found where it is unlawful for juveniles to be). A juvenile delinquent is any juvenile between 6 and 15 who commits an offense that would be a crime under state or local law if committed by an adult (36).



According to data provided by the local JCPC program, 46 juveniles were seen by court counselors as part of the intake process in Fiscal Year (FY) 20-21. Among the Person County juveniles assessed in the last half of 2020, 48% had moderate or serious school behavior problems in the prior school year; more than 95% were functioning at grade-level. Nearly two-thirds of the juveniles assessed had prior court referrals and the same proportion had no known substance use. Sixteen percent of the juveniles were involved in a gang (37).

## Sexual Assault and Domestic Violence

The Domestic Violence Commission of the NC Council for Women publishes data pertaining to both sexual assault and domestic violence, provided by local agencies that receive funding from them. In FY2020-21 that local agency was Safe Haven of Person County with whom 39 individuals filed domestic violence complaints and were provided a wide range of services, the most frequent of which were information, advocacy, and referrals. The local domestic violence shelter was full on 265 days of the 2020-21 fiscal year. In FY2020-21, five individuals filed sexual assault complaints. The most common type of offender was an acquaintance, and the most common type of assault was rape (38). Between 2015 and 2020 there were three domestic violence-related homicides in Person County (39).

## Child Maltreatment

The responsibility for identifying and reporting cases of child abuse, neglect, and exploitation falls to the child protective services program within a county's department

of social services. Between FY2004-05 and FY2020-21, an average of 245 reports of child abuse, neglect or dependency were investigated in Person County each year and an average of 36 (15%) were substantiated. Neglect was the most common substantiated finding, accounting for an average of 81% of substantiated cases between FY2004-05 and FY2020-21. In FY2020-21 there were 12 substantiated findings: four cases of abuse and neglect, two cases of abuse, and six cases of neglect. Among the substantiated cases in FY2020-21, 83% were white, 50% were female and 50% were male; 33% were under age 6, 17% were aged 6-12, and 50% were aged 13-17 (40).

Among 2022 Person County Community Health Survey respondents, 58% identified crime as one of the five most important local social issues, 43% selected gang activity, 42% chose neglect and abuse as an important issue, and 20% named unsafe schools as a social issue impacting quality of life in Person County (22).

## Community Health Survey: Adverse Childhood Experiences

Adverse Childhood Experiences (ACEs) are potentially traumatic events, such as experiencing violence, neglect or abuse, witnessing violence in the home, or having a family member attempt or die by suicide. Growing up in a household that includes substance use problems, mental health problems, or instability due to parental separation or incarceration can undermine a child's sense of safety and stability. According to the CDC, "ACEs are linked to chronic health problems, mental illness, and substance use problems in adolescence and adulthood. ACEs can also negatively impact education, job opportunities, and earning potential" (41).

After discussion among the CHA Team and with the public health consultant, an ACEs module following the Behavioral Risk Factor Surveillance System (BRFSS) language was added to the 2022 Person County Community Health Survey. Responses were analyzed by the consultant to determine the total number of adverse childhood experiences reported by each individual. While 44% of respondents reported no adverse childhood experiences, nearly 40% of respondents reported between 1 and 3 adverse childhood experiences, and 16.5% reported 4 or more ACEs. The most commonly reported adverse childhood experiences were: living with a problem drinker or alcoholic (28%), experiencing verbal abuse at home more than once (27%), parents being separated or divorced (26%), and living with a depressed, mentally ill, or suicidal person (23%) (22).

Total Number of ACEs (Experienced before the age of 18)	2022	
	#	%
No ACEs	266	43.9%
1 to 3 ACEs	240	39.6%
4 or more ACEs	100	16.5%

Total Responses	606
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## FAMILY AND SOCIAL SUPPORT

According to 2020 ACS estimates, 29% of Person County householders were living alone and 14% of householders living alone were over the age of 65. Nearly 14% of Person County households are comprised of married couples with minor children, 8% are single mothers of minor children, and almost 2% are single fathers of minor children (42).

In 2020, an estimated 965 grandparents in Person County were living with minor grandchildren; 30% of those grandparents were responsible for the grandchildren, meaning they are financially responsible for the basic needs of the grandchild, including food, clothing, and day care. Compared to NC, a higher proportion of the Person County grandparents responsible for grandchildren were disabled (31.5%), lived below the poverty level (33%), and had no parent of the grandchildren present (47%) (43).

## ENVIRONMENTAL CONTEXT

### AIR QUALITY INDEX

The US Environmental Protection Agency (EPA) maintains air quality monitoring stations throughout the country to continuously measure the air pollutants that most affect the health and well-being of the public including: carbon monoxide, nitrous oxide, sulfates, ozone, and particulate matter. These stations tend to be in populous areas or along highway routes that carry significant traffic loads. The Person County station measured air quality on 245 days in 2021: 220 were good, 25 were moderate, and none were unhealthy. The primary air pollutant was ozone (44).

### TOXIC CHEMICAL RELEASES

The US Toxic Releases Inventory (TRI) program is the tool the EPA uses to track industrial releases of toxic chemicals to land, air and water. Approximately 20,000 industrial facilities are required to report estimates of their environmental releases and waste generation annually to the TRI program office. Note that these reports do *not* cover all toxic chemicals, and they omit pollution from motor vehicles and small businesses.

According to the 2020 TRI Annual Summary for NC, Person County had the 7<sup>th</sup> highest level of TRI releases among the 84 reporting counties in NC with 3,306,376 pounds of releases. For context, Bladen County, ranking 1<sup>st</sup>, released more than 5.3 million pounds of TRI chemicals in 2020. The primary releasing industry in Person County was power generation utilities, and the primary releasing facilities were CPI USA and Duke

Energy. The primary TRI chemical released (more than 1.7 million pounds in 2021) in Person County was zinc compounds (45). Zinc compounds can enter the body through the digestive tract when you eat food or drink water containing it and it can also enter through inhalation of zinc dust or fumes. Little is known about the long-term effects of exposure through inhalation, though metal flume fever, a short-term, flu-like condition, can result from regular exposure (46).

## DRINKING WATER SYSTEMS

Public water systems provide drinking water to most Americans, and they must abide by established and enforced safety standards. The most common non-public source of water is private wells, the safety of which must be maintained by the homeowner. The EPA's Safe Drinking Water Information System (SDWIS) contains information about public water systems and their violations of EPA's drinking water regulations, as reported to EPA by the states. The EPA establishes maximum contaminant levels, treatment techniques, and monitoring and reporting requirements to ensure that water systems provide safe water to their customers.

As of September 2022, less than 30% of the Person County population, around 12,000 residents, were served by community water systems. The primary water system, serving the town of Roxboro, had no health-based violations (a contaminant exceeded the safety standard or water was not treated properly) in the past 10 years. The remaining 70% of the county population get their water from private wells or other sources and are at greatest risk for environmental contamination of their water source (47).

## SOLID WASTE DISPOSAL

In FY2020-21, the county handled 61,395 tons of municipal solid waste (MSW), a rate of 1.3 tons per capita, which is a 62% decrease from the per capita rate for FY1991-92 (the period customarily used for the base rate). The overall state per capita solid waste management rate was 1.32, 23% higher than the FY1991-92 base per capita rate (48).

Almost all (99%) of the solid waste generated in Person County is landfilled at the Upper Piedmont Regional Landfill, located in Rougemont, NC (49). According to a state report for FY2020-21 the landfill had enough capacity estimated to last for nearly 38 years (50).

## ACCESS TO HEALTHY FOOD & PLACES

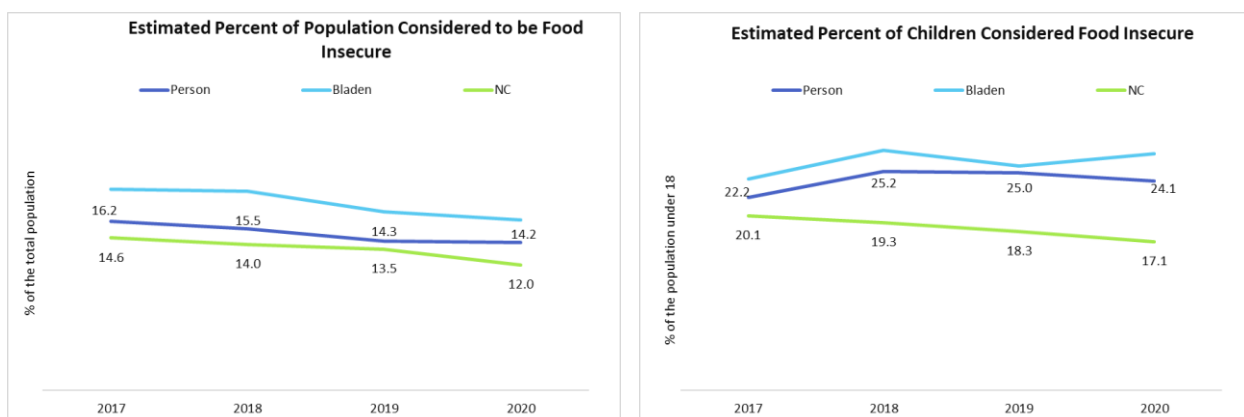
As of January 2022, nearly 4,000 households comprised of more than 7,600 individuals (36.5% of them under the age of 18) were receiving Food and Nutrition Services (FNS) benefits, an increase from 3,510 households and 6,756 individuals in January of 2021 (51).



Meals provided by local school systems are an important source of nutrition, particularly in rural counties. School children who are determined to be “needy” (usually referred to by school systems as Economically Disadvantaged) qualify to receive free- and reduced-cost school meals. In Person County, 71% of students in SY19-20 were determined to be needy, higher than NC (57.7%) and lower than Bladen County (>90%). More recent data is not available due to a statewide policy that all school meals were provided to all children for free in SY20-21 and SY21-22 (52).

Food security, as defined by the United Nations’ Committee on World Food Security, exists when all people, at all times, have physical, social, and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life.

According to Feeding America’s estimates, 14% of the overall Person County population was food insecure in 2020; 24% of children were food insecure. While data is only available to describe a few years, Person County estimates were higher compared to NC and lower than Bladen County estimates for the four years shown. Food insecurity tends to be higher among children compared to the total population (53).



Among respondents to the 2022 Community Health Surveys, 54% identified “poor eating habits” as an unhealthy behavior having a large impact on quality of life in Person County. The availability of healthy food choices in grocery stores and restaurants was selected by 37.5% of respondents when asked what service issues had an impact on life in Person County (22).

## Transportation

According to 2020 ACS estimates, 5.3% (838) of Person County housing units had no vehicle available, a lower proportion compared to Bladen County (8.2%) and similar to NC (5.6%). Rented units were more likely than owned units to have no vehicle available: 18.7% of renter-occupied units lacked vehicle access while 1.4% of owner-

occupied units did not have a vehicle. Person County householders over the age of 65 were more likely than middle-aged or younger residents to lack vehicle access: 51% of the households with no vehicle access had householders aged 65 and older. Statewide and in Bladen County, higher proportions of middle aged householders lack vehicle access (54).

Among workers aged 16 and older, 44% traveled outside of Person County for work in 2020; an additional 2.3% travel outside of NC for work. The majority of those individuals drove alone to work; 8% carpooled, 3% walked, used a taxi, motorcycle or other form of transportation, and 6% worked from home.

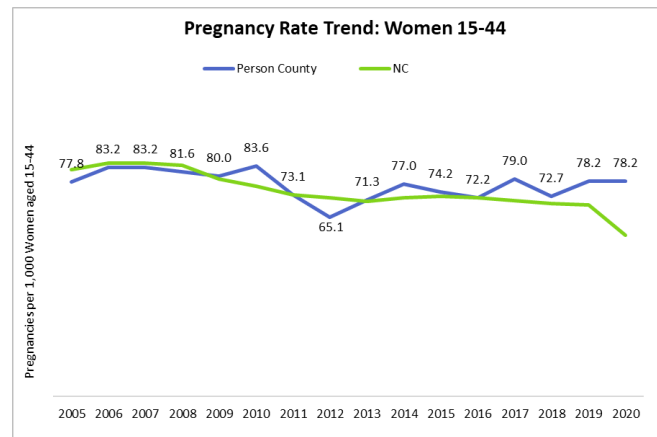
The lack of transportation options was identified as an important service issue impacting quality of life in Person County by 30% of survey respondents in 2022. Unsafe, unmaintained roads were identified as an issue by 15% of respondents (22).

# HEALTH STATUS

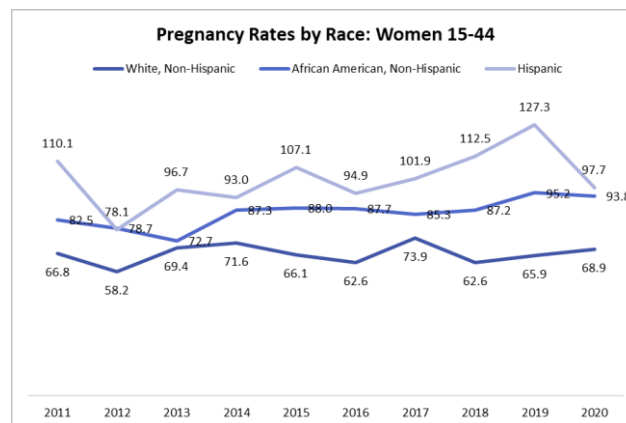
## MATERNAL AND INFANT HEALTH

### Pregnancy Rates

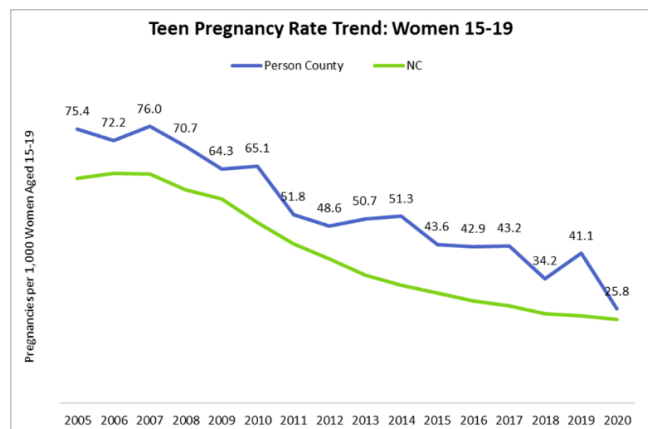
While the *overall* pregnancy rate for women of childbearing age (15-44) has declined statewide, the Person County rate has increased overall from a low of 65.1 in 2012 to 78.2 in 2020. The 2020 Person County pregnancy rate was higher compared to NC and Bladen County.



The pregnancy rate among African American women has risen gradually over the past decade and the pregnancy rate among Hispanic women, typically the highest, decreased in 2020 after rising steadily for four years (53).



Pregnancy rates among teens (ages 15-19) in Person County, Bladen County and North Carolina decreased more than 60% between 2005 and 2020. In 2020, the teen pregnancy rate in Person County was 25.8, *higher* than the state rate of 22.9 and lower than the Bladen County rate of 33.9 (55). In terms of numbers rather than rates, teen pregnancies in Person County fell from a high of 93 in 2009 to a low of 38 in 2019 and rose to 44 in 2020 (56).



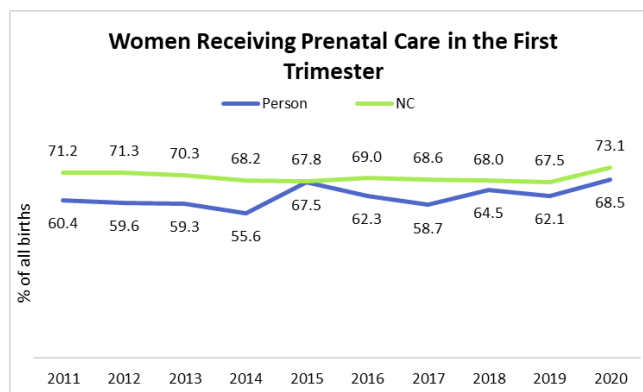
## Pregnancy Risk Factors

A birth is considered *high parity* if the mother has had five or more pregnancies lasting to at least 20 weeks gestation. A *short-interval* birth involves a conception occurring less than six months since the last birth. High-parity and short-interval pregnancies can be a physical strain on the mother and sometimes contribute to complicated pregnancies and/or poor birth outcomes.

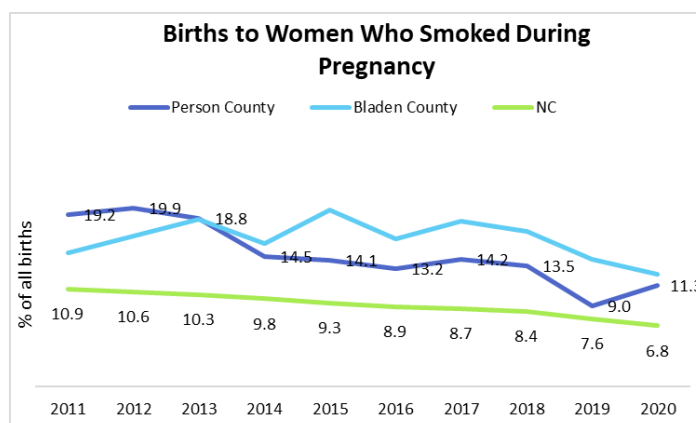
Person County mothers were more likely than NC mothers to have high parity and short-interval births in 2016-2020. Approximately 15% of births to mothers under 30 and 25% of births to mothers over age 30 were high parity in Person County in 2016-2020 compared to 13% and 23% in NC, respectively. In Person County, 14% of births were short-interval compared to 13% in NC (57).

Good pre-conception health and early prenatal care can help assure women the healthiest pregnancies possible. The percent of pregnant women in Person County who received early prenatal care (in the first three months of their pregnancies) was lower compared to NC between 2011 and 2020.

However, the trend is hopefully demonstrating improvement: the percentage increased from 62% in 2019 to 68.5% in 2020. Statewide in 2020, 73% of women received prenatal care in the first trimester (58).



Smoking during pregnancy is an unhealthy behavior that may have negative effects on both the mother and the fetus. Smoking can lead to fetal and newborn death and contribute to low birth weight and pre-term delivery. The percent of births to mothers who smoked during pregnancy was higher in Person County than in NC between 2011 and 2020. In 2020, 11.3% of births were to mothers who reported smoking while pregnant, compared to 12.5% in Bladen County and 6.8% statewide (59).

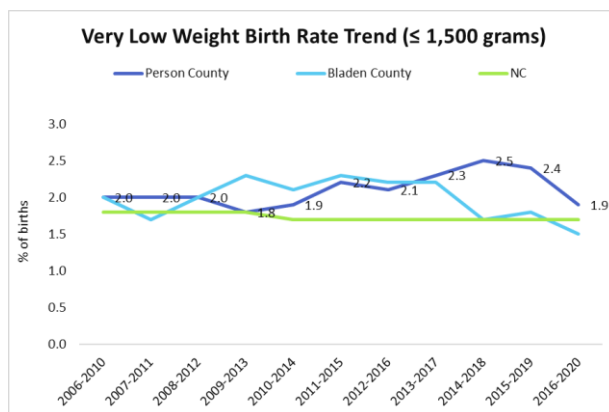
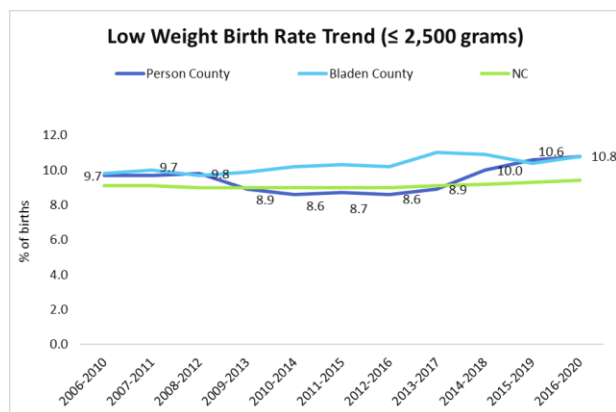


## Birth Outcomes

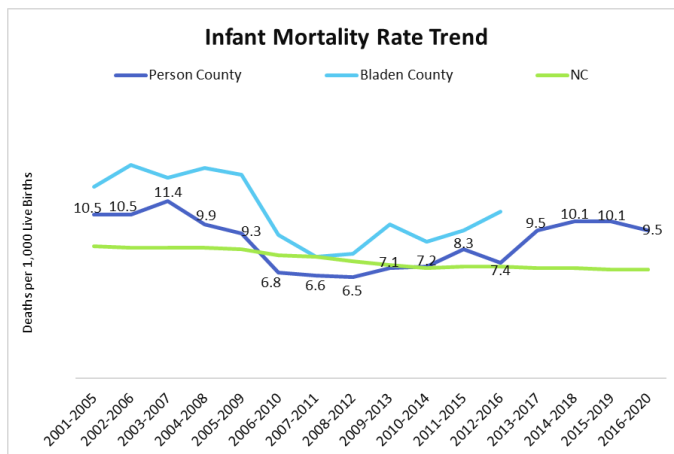
Low birth weight can result in serious health problems in newborns (e.g., respiratory distress, bleeding in the brain, and heart, intestinal and eye problems), and cause

lasting disabilities (developmental delays, cerebral palsy, and vision and hearing loss) or even death (60).

Low weight births have become more common in Person County since 2012-2016 and in 2016-2020, 10.8% of births were low weight (less than 5.5 pounds), the same as in Bladen County and higher compared to 9.4% statewide. Very low weight births (less than 3.3 pounds) decreased in the most recent two periods but remain slightly higher than both NC (1.7%) and Bladen County (1.5%) (61).



The infant mortality rate is the number of deaths of infants under one year of age per 1,000 live births. The infant mortality rate in Person County decreased between 2003-2007 and 2008-2012 but then rose in almost every period until 2015-2019. In 2016-2020, the overall infant mortality rate in Person County was 9.5, higher than the comparable state rate of 7.0. Between 2001-2005 and 2016-2020 an average of 19 infant deaths occurred each year (62).

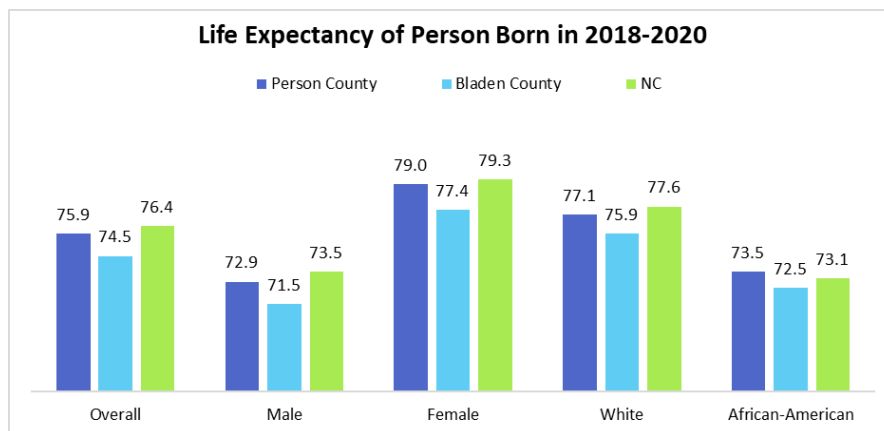


There are too few incidents of infant death among minorities in Person County to calculate stable infant mortality rates, but it is apparent from statewide data that infant mortality rates among African American non-Hispanics far exceed the comparable rates for white non-Hispanics. Statewide in 2016-2020, the infant mortality rate among African American non-Hispanics was 12.7, much higher than the overall rate (7.0) and more than double the comparable rate among white non-Hispanics (4.9) (63).

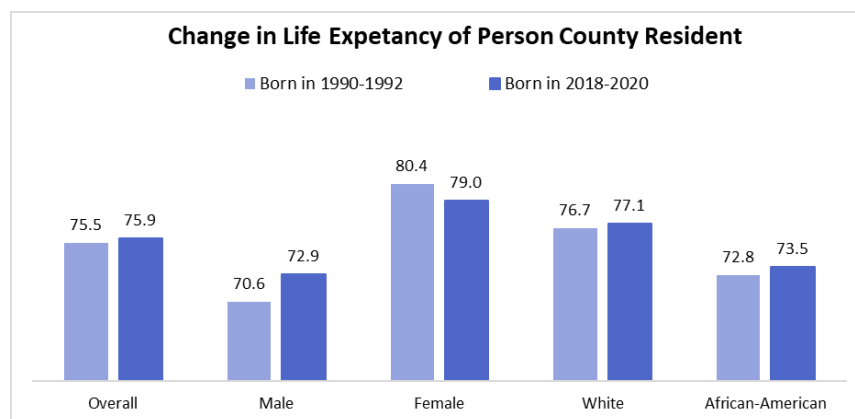
## LIFE EXPECTANCY AND LEADING CAUSES OF DEATH

### Life Expectancy

A person born in Person County in 2018-2020 has an average life expectancy of 75.5 years. Females tend to live longer than males, with the average male in Person County living to be 70.6 years old and the average female living to be 80.3. African Americans in Person County have shorter life expectancies than white individuals: 72.8 compared to 76.7.



Life expectancy in Person County has demonstrated only slight changes in the past several decades. Compared to someone born in Person County in 1990-1992, someone born in 2018-2020 only lives a fraction of a year longer. Life expectancy has increased the most for males, and improved a little for white and African American residents. Life expectancy for females, however, has decreased (64).



### Leading Causes of Death

Two tables are provided below the following narrative, displaying the mortality rates and the changes that are discussed. The first table provides the rates for Person

County, Bladen County, and North Carolina. The second table provides the calculated rate changes since 2001-2005, since 2012-2016 (the data presented in the 2018 Person County CHA), and the differences between Person County and the comparators used.

1. **Heart disease** was the leading cause of death in Person County in 2016-2020, and the mortality rate due to heart disease decreased 28% since 2001-2005 and increased 3% since 2012-2016. The heart disease mortality rate was 16% lower in Person County compared to Bladen County and 10% higher compared to NC in 2016-2020.
2. **Cancer** was the second leading cause of death in Person County, with a 2016-2020 mortality rate that was 11% higher compared to NC and very similar to Bladen County. The cancer mortality rate in Person County decreased 21% overall since 2001-2005 and decreased 12% since 2012-2016. Further discussion of the most common site-specific cancers is included in later sections of this report.
3. **Unintentional injuries** (which includes death without purposeful intent due to poisoning, falls, burns, choking, animal bites, drowning, and occupational or recreational injuries) were the third most common cause of death in Person County in 2016-2020. The county mortality rate was 7% lower than Bladen County and 11% higher compared to NC. Since 2001-2005, the unintentional injury mortality rose 62% in Person County; the rate increased 85% since 2012-2016. It should be noted that overdose deaths (often classified as unintentional poisonings) fall under the category of unintentional injury deaths.
4. **Chronic lower respiratory diseases (CLRD)** were the fourth leading cause of death in Person County, and the 2016-2020 mortality rate was 14% higher than the Bladen County rate and 8% higher compared to NC. The CLRD mortality rate in Person County decreased 17% since 2001-2005 and increased 14% since 2012-2016.
5. **Cerebrovascular disease (stroke)** was the fifth leading cause of death in Person County, with a 2016-2020 mortality rate 6% lower compared to Bladen County and 22% lower compared to NC. The Person County stroke mortality rate has decreased over time: 67% since 2001-2005 and 31% since 2012-2016.
6. **Diabetes** was the sixth leading cause of death in Person County, and in 2016-2020, the mortality rate was 15% lower compared to Bladen County and 25% higher compared to NC. Person County diabetes mortality increased 12% overall since 2001-2005 and decreased just 4% since 2012-2016.



7. **Alzheimer's disease** ranked as the seventh leading cause of death in Person County in 2016-2020, with the county mortality rate falling 34% below the state average and 33% lower than Bladen County's rate. The Person County Alzheimer's disease mortality rate rose 70% since 2001-2005 and rose 6% since 2012-2016.
8. **Kidney diseases (Nephritis, Nephrotic Syndrome, and Nephrosis)** were the eighth leading cause of death in Person County, with a 2016-2020 county mortality rate 5% lower than the Bladen County rate but 38% higher than the NC rate. The Person County kidney disease mortality rate increased over time: 10% since 2001-2005 and 58% since 2012-2016.
9. **Septicemia** was the ninth leading cause of death in Person County in 2016-2020. The county mortality rate was 32% higher compared to Bladen County and 60% higher compared to NC. The 2016-2020 Person County mortality rate was 20% higher than it was in 2001-2005 and 27% higher compared to 2012-2016.
10. **Suicide** was the tenth leading cause of death in Person County and the 2016-2020 mortality rate was 65% higher than the Bladen County rate and 25% higher compared to NC. The suicide mortality rate fell 6% since 2001-2005 but rose 13% since 2012-2016.
11. **Unintentional motor vehicle injuries (UMVI)** are the eleventh leading cause of death in Person County. The 2016-2020 mortality rate was 64% lower compared to Bladen County and 8% higher compared to NC. The Person County UMVI mortality rate decreased over time: 41% since 2001-2005 and 26% since 2012-2016.
12. **Pneumonia and influenza** ranked as the twelfth leading cause of death in Person County, with the 2016-2020 county mortality rate falling 20% below the state rate and 26% lower than Bladen County. The Person County pneumonia/influenza mortality rate was 52% lower than it was in 2001-2005, and it was 41% lower than it was in 2012-2016.
13. **Chronic liver disease and cirrhosis** was the thirteenth leading cause of death in Person County; the 2016-2020 liver disease mortality rate was 48% higher compared to Bladen County and 12% higher compared to NC. The Person County rate has increased over time: the 2016-2020 rate was 6% higher compared to 2001-2005 and 20% higher compared to 2012-2016.
14. **COVID-19** was the fourteenth leading cause of death in Person County, with a 2016-2020 mortality rate that was 26% lower compared to Bladen County and

32% lower than NC. Due to the newness of the condition, trend data is not available currently.

15. **Homicide** was the fifteenth leading cause of death in Person County, with many of the mortality rates based on a less than 20 deaths per 5-year aggregate, with subsequently unstable rates. Person County tends to demonstrate lower homicide mortality rates compared to Bladen County.
16. **AIDS** deaths are also rare in Person County. Many aggregate periods examined for the purpose of this report reflect fewer than 5 deaths and rates are variable from period to period. (65)

Mortality Rates for Leading Causes of Death	Person County	Person County	Person County	Bladen County	NC
	2001-2005	2012-2016	2016-2020	2016-2020	2016-2020
Diseases of the Heart	237.7	166.9	172.0	205.5	156.1
Cancer	217.0	195.8	171.6	169.4	154.6
All Other Unintentional Injuries	29.5	25.8	47.8	51.5	43.2
Chronic Lower Respiratory Disease	55.3	40.6	46.1	40.3	42.5
Cerebrovascular Disease	99.8	48.0	33.2	35.3	42.7
Diabetes Mellitus	27.4	31.9	30.7	36.3	24.5
Alzheimer's disease	14.5	23.1	24.6	36.7	37.4
Nephritis, Nephrotic Syndrome and Nephrosis	20.6	14.4	22.7	23.9	16.4
Septicemia	16.7	15.7	20.0	15.1	12.5
Suicide	17.8	14.8	16.7	<b>10.1</b>	13.4
Unintentional Motor Vehicle Injuries	27.7	21.9	16.3	45.3	15.1
Pneumonia and Influenza	25.9	21.2	12.5	16.9	15.7
Chronic Liver Disease and Cirrhosis	11.7	10.3	12.4	8.4	11.1
COVID-19	n/a	n/a	8.7	11.7	12.8
Homicide	<b>6.4</b>	<b>4.8</b>	<b>9.3</b>	18.0	7.3
Acquired Immune Deficiency Syndrome	<b>3.8</b>	<b>2.6</b>	<b>1.1</b>	<b>1.1</b>	1.6

Rates based on fewer than 20 cases (indicated by N/A) are unstable and have been presented in bold.

Comparisons and Changes Leading Causes of Death	% Change since	% Change since	% Difference from Bladen	% Difference from NC
	2001-2005	2012-2016	2016-2020	2016-2020
Diseases of the Heart	-28%	3%	-16%	10%
Cancer	-21%	-12%	1%	11%
All Other Unintentional Injuries	62%	85%	-7%	11%
Chronic Lower Respiratory Disease	-17%	14%	14%	9%
Cerebrovascular Disease	-68%	-31%	-6%	-22%
Diabetes Mellitus	12%	-4%	-15%	25%
Alzheimer's disease	70%	7%	-33%	-34%
Nephritis, Nephrotic Syndrome & Nephrosis	10%	58%	-5%	38%
Septicemia	20%	27%	32%	60%
Suicide	-6%	13%	65%	25%
Unintentional Motor Vehicle Injuries	-41%	-26%	-64%	8%
Pneumonia and Influenza	-52%	-41%	-26%	-20%
Chronic Liver Disease and Cirrhosis	6%	20%	48%	12%
COVID-19	n/a	n/a	-26%	-32%
Homicide	n/a	n/a	-48%	n/a
Acquired Immune Deficiency Syndrome	n/a	n/a	0%	n/a

Although complete analysis of disaggregated data in the following table is hampered by suppressed unstable rates, from the stable rates available it appears that Person County males disproportionately suffer mortality from many leading causes of death. African Americans in Person County suffer disproportionate mortality due particularly to diabetes and kidney diseases (66).

Gender and Racial Disparities Leading Causes of Death	% Difference Male and Female Rates	% Difference Between African American and White Rates
	2016-2020	2016-2020
Diseases of the Heart	75%	31%
Cancer	45%	11%
All Other Unintentional Injuries	110%	-37%
Chronic Lower Respiratory Disease	34%	--
Cerebrovascular Disease	20%	13%
Diabetes Mellitus	48%	181%
Alzheimer's disease	--	59%
Nephritis, Nephrotic Syndrome, & Nephrosis	67%	240%
Septicemia	6%	--
Suicide	--	--
Unintentional Motor Vehicle Injuries	--	--
Pneumonia and Influenza	--	--
Chronic Liver Disease and Cirrhosis	--	--
COVID-19	--	--
Homicide	--	--
Acquired Immune Deficiency Syndrome	--	--

Each age group tends to have its own leading causes of death. Note that for this purpose, it is important to use *non-age adjusted* death rates. In the period 2016-2020, the leading cause(s) of death in each of the age groups in Person County were as follows (67):

- Age Group 00-19: Conditions originating in the perinatal period
- Age Group 20-39: All other unintentional injuries (non-motor vehicle injuries)
- Age Group 40-64: Cancer - all sites
- Age Group 65-84: Cancer - all sites
- Age Group 85+: Diseases of the heart

## Cancer

Total cancer was the second leading cause of death in Person County in the 2016-2020 period. Examining incidence and mortality rate trends for site-specific cancers can help clarify the problem of cancer in the community. The tables below summarize

trends in the incidence and mortality rates for the four most common site-specific cancers: lung cancer, prostate cancer, breast cancer, and colorectal cancer. It is important to keep in mind that screening activities impact incidence rates by discovering cancer cases that might otherwise go unnoticed. A rise in incidence connected to screening is not necessarily a bad thing, since the resulting figure may include numerous cases that were caught early and treated.

Cancer Mortality and Incidence Rates		Person County	Person County	Person County	NC
		2001-2005	2012-2016	2016-2020	2016-2020
Total Cancer	Mortality	217.0	195.8	171.6	154.6
	Incidence	498.4	469.6	488.4	464.3
Lung Cancer	Mortality	60.5	57.1	39.3	40.1
	Incidence	68.9	70.5	61.2	60.8
Colorectal Cancer	Mortality	21.6	21.6	19.0	12.9
	Incidence	43.6	45.1	35.7	33.9
Breast Cancer	Mortality	18.6	21.0	17.8	20.1
	Incidence	146.8	156.9	176.4	162.8
Prostate Cancer	Mortality	45.1	16.6	18.4	19.5
	Incidence	195.9	93.9	100.7	118.0

Comparisons and Changes in Cancer Mortality and Incidence		% Change since	% Change since	% Difference from NC
		2001-2005	2012-2016	2016-2020
Total Cancer	Mortality	-21%	-12%	11%
	Incidence	-2%	4%	5%
Lung Cancer	Mortality	-35%	-31%	-2%
	Incidence	-11%	-13%	1%
Colorectal Cancer	Mortality	-12%	-12%	49%
	Incidence	-18%	-21%	5%
Breast Cancer	Mortality	-4%	-15%	-11%
	Incidence	20%	12%	8%
Prostate Cancer	Mortality	-59%	11%	-6%
	Incidence	-49%	7%	-15%

Mortality for all four site-specific cancers have fallen in the long term; only prostate cancer mortality rates have risen in the short term. Compared to NC in 2016-2020, Person County demonstrated higher mortality rates for total cancer and colorectal cancer.

Breast cancer incidence rates rose since 2001-2005 and since 2012-2016 and remain 8% higher compared to the state. Prostate cancer incidence has also risen since 2012-

2016, though the rate remains lower compared to NC. Colorectal cancer incidence rates decreased in Person County both in the long- and short-term, but they were higher than the comparable state rate in 2016-2020 (68).

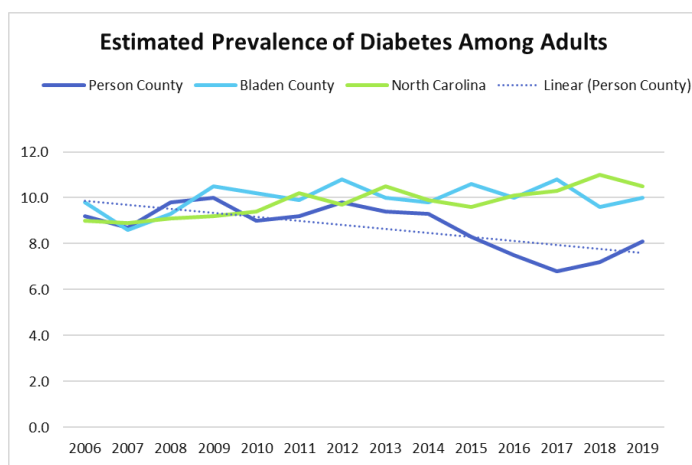
## MORBIDITY AND CHRONIC DISEASE

### Diabetes

As noted previously, diabetes was the sixth leading cause of death overall in Person County in 2016-2020. In that period, the county diabetes mortality rate exceeded the state rate by 25%, and it decreased by only 4% since the 2012-2016 period.

Approximately 16% of the respondents to the 2022 Person County Community Health Survey reported having received a medical diagnosis of diabetes, and 25% had been diagnosed with pre- or borderline diabetes. Diabetes ranked as the third most important health problem impacting quality of life in Person County, as selected by 60% of respondents (22).

Data available from the Centers for Disease Control and Prevention (CDC), based on estimates derived from self-reported responses to the BRFSS, describes the estimated prevalence of diagnosed diabetes among adults aged 20 and older at the county level. According to this data, the prevalence of adult diabetes in Person County was 8.1% in 2019, an increase from 6.8% in 2017 but still below the NC rate of 10.5% in 2019 (69).

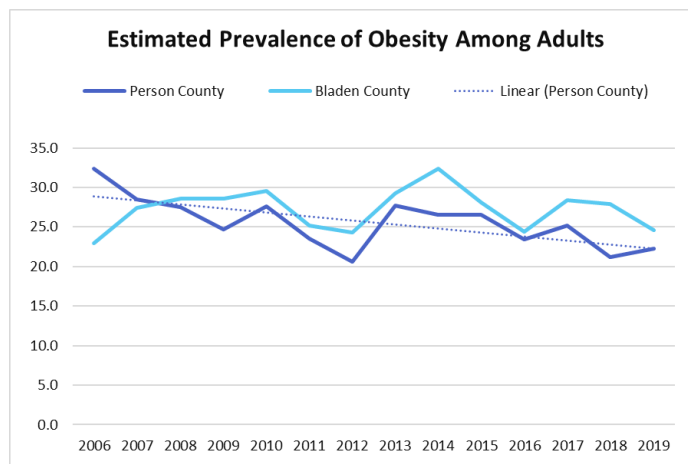


According to data provided by Person Memorial Hospital, 463 Person County residents were discharged from the emergency department (ED) with a diagnosis of diabetes in Calendar Year (CY) 2019-CY2021, averaging 154 each year. The facility discharged 111 residents from inpatient hospitalization with a diabetes diagnosis over the same period, an average of 37 people per year.

### Overweight and Obesity

Overweight and obesity are well-recognized as precursors to many health problems, including diabetes. As with diabetes, the CDC describes the estimated prevalence of diagnosed obesity in adults aged 20 and older at the county level. According to this data (also derived from the BRFSS) the prevalence of diagnosed obesity in Person

County was 22.3% in 2019, lower compared to 24.6% in Bladen County. (Similar state-level data is not available from the source.) (70).



According to results from the 2022 Person County Community Health Survey, 52% of respondents reported that they had been diagnosed by a doctor, nurse, or other health professional as either overweight or obese. Obesity/overweight ranked as the sixth most important health problem in Person County, with 51% of respondents choosing it from the list of options (22).

While data on childhood obesity is just as sparse as data on adult obesity, the existing data appears to indicate that overweight and obesity are pervasive among toddlers. According to 2018 data from North Carolina Pediatric Nutrition and Epidemiology Surveillance System (NCPedNESS), 12% of 2 to 4-year-olds in the NCPedNESS program in Person County were overweight and 17.2% were obese. For comparison, according to the same source, in Bladen County 17.2% of 2 to 4-year-old participants were overweight and 17.9% were obese, and statewide 14.4% were overweight and 15.9% were obese (71).

## Chronic Diseases

Complications from overweight and obesity include not only diabetes but also heart disease, high cholesterol, and high blood pressure. Each of these conditions is prevalent in the Person County community, as indicated by results of the 2022 Person County Community Health Survey. In this survey, 8% of the respondents reported they had been diagnosed with angina or heart disease, 46% reported they had been diagnosed with high blood pressure, and 41% had received a diagnosis of high cholesterol (22).

In CY2019-CY2021, Person Memorial Hospital saw 988 discharges from the ED and 308 inpatient discharges due to heart diseases, averaging 329 and 103, respectively, per year.



## Physical Activity

The 2022 Person County Community Health Survey asked whether respondents got least 150 minutes of moderate physical activity a week or 75 minutes of vigorous physical activity a week. Less than half of respondents (48%) got the recommended amount of weekly physical activity. Lack of exercise/poor physical fitness was the third most commonly identified unhealthy behavior, as selected by 57% of respondents (22).

## Tobacco Use

As noted earlier, chronic lower respiratory disease was the fourth leading cause of death, rates rose since the last CHA, and the 2016-2020 county mortality rate was 8% higher compared to the state. Approximately 12% of 2022 survey respondents had been diagnosed with a lung disease (including asthma). More than 1,000 emergency department discharges and 100 inpatient discharges from Person Memorial Hospital in CY2019 through CY2021 had a CLRD diagnosis (an average of 354 and 34 a year, respectively). Tobacco use is a critical risk factor for CLRD and Chronic Obstructive Pulmonary Disease (COPD). As discussed in the Maternal Health section, 11% of Person County births in 2020 were to mothers who smoked during pregnancy, higher than the state rate of 6.8%. Among 2022 Person County survey respondents, 11% reported smoking tobacco either every day (7.4%) or some days (3.9%); 7% reported current e-cigarette use (3.3% every day and 3.5% some days); and 3% used smokeless tobacco (1.2% every day and 2% some days) (22).

## Communicable Diseases

Sexually transmitted infections (STIs) are the most common communicable diseases in Person County, comprising more than 90% of all reportable communicable diseases in the county between 2015 and 2021 (72). Chlamydia is the most prevalent STI, followed by gonorrhea. While Person County incidence rates for both chlamydia and gonorrhea were lower than comparable rates for the state from 2009 through 2020, rates have demonstrated an overall increase. In 2020, the Person County incidence rate for chlamydia infection was 601 new cases per 100,000 population, close to the state rate of 607 (73). In 2020, the gonorrhea incidence rate in Person County was 173 new cases per 100,000 population, lower than the state rate of 264 (74). HIV incidence is highly variable in Person County and is typically based on fewer than five cases per year; Person County HIV incidence rates were lower compared to NC between 2009 and 2020 (75).

## Mental Health

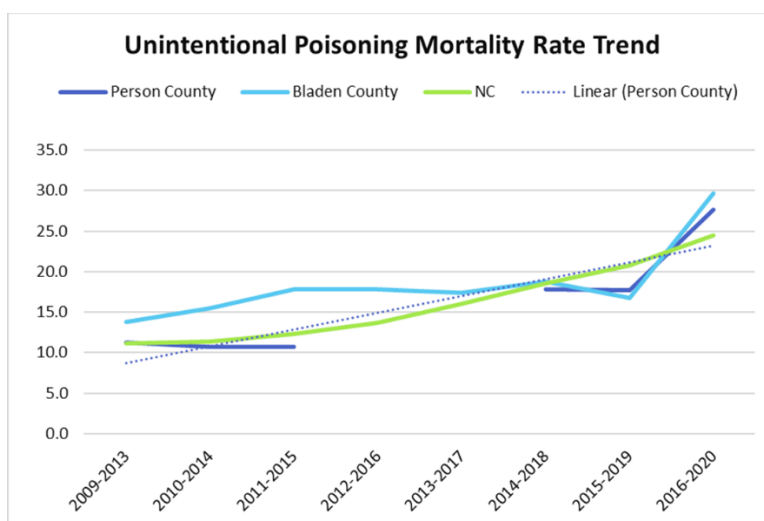
According to data from the NC Division of Mental Health/Developmental Disabilities/Substance Abuse Services (MH/DD/SAS), the number of Person County residents served by the Area Mental Health Program (currently VAYA) averaged 1,424 per year between SFY2016 and SFY2020 (76). According to de-identified ED

discharge data provided to the consultant by Person Memorial Hospital, 1,150 individuals were seen in the emergency department for mental, behavioral, and neurodevelopmental disorders in CY2019-CY2021, an average of 386 per year and comprising 3% of all ED discharges. Over that same period, the hospital had 86 ED discharges due to suicidal ideation. According to data supplied by Person County EMS for FY19 through FY22, emergency responders managed an average of 71 calls a year related to “psychiatric” issues (77).

On the 2022 Person County Community Health Survey, 35% of respondents self-reported a personal diagnosis of depression or anxiety. Mental health was the second most commonly identified health problem impacting quality of life in Person County, with 61% of respondents choosing it (22).

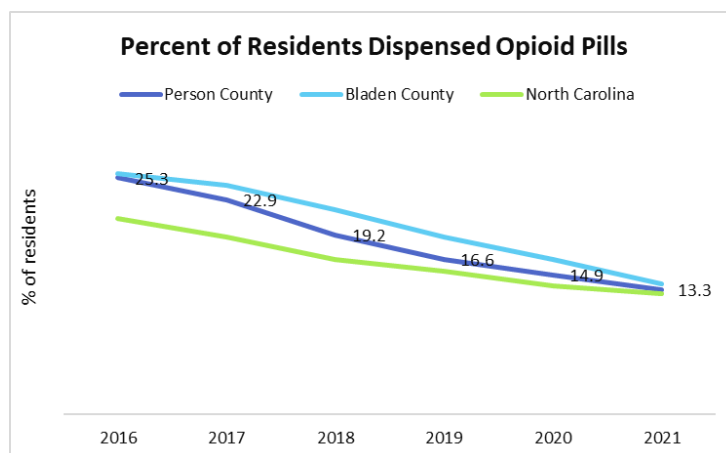
## Substance Use

While some data is suppressed due to low numbers, the Person County unintentional poisoning mortality rates had demonstrated a clear increase since data were first published in 2009-2013. In 2016-2020, the Person County unintentional poisoning mortality rate was 27.6, compared to 29.7 in Bladen County and 24.5 in NC (78).

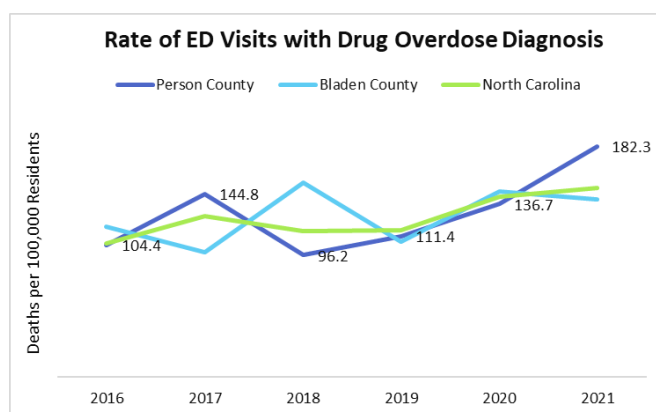


According to unintentional poisoning-related data from the Injury and Violence Prevention Branch at NC Division of Public Health, between 2011 and 2020, there were 63 deaths, 238 hospitalizations, and 971 ED visits due to unintentional poisoning in Person County. Opioids were the most common substance contributing to these ED visits, hospitalizations, and deaths in Person County. Stimulants and benzodiazepines were the other most common substances. Note that a reported hospital encounter or death may involve multiple substances and that alcohol is not included in this data (79).

The NC Opioid and Substance Use Action Plan established a data dashboard in 2017, and while the metrics presented have changed over time, the dashboard remains a unique source of substance-use data. The number and percentage of Person County residents who were dispensed opioid pills has decreased steadily since 2016, but the Person County rate exceeded the state rate over the entire period shown, below.



Between 2016 and 2020, there were a total of 306 emergency department visits with a drug overdose diagnosis among Person County residents, an average of 50 per year. Community-administered naloxone reversals were rare in Person County, with a total of 5 being reported between 2013 and 2021.



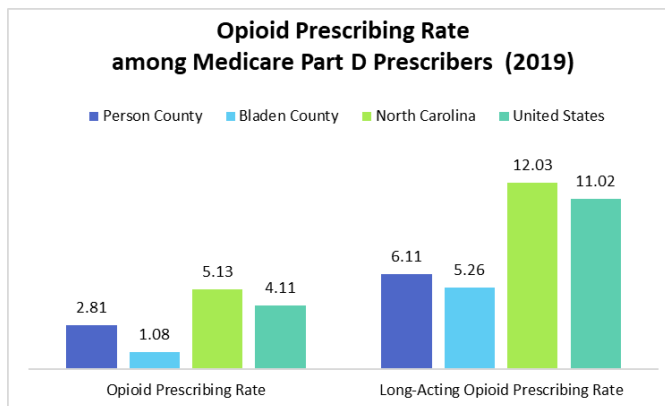
An increasing percentage of opioid deaths in Person County, Bladen County, and the state involved illicit opioids such as heroin, fentanyl, and fentanyl-analogues. In 2020, more than 50% of overdose deaths in Person County involved illicit opioids; in Bladen County and NC, more than 75% of overdose deaths involved heroin or fentanyl.

On average between 2015 and 2021, 60% of children in foster care in Person County were there due to parental substance use, higher compared to Bladen County (34%) and the state (42%).

Buprenorphine is the primary medication used in medication-assisted treatment of opioid dependence. In Person County, the number of buprenorphine prescriptions dispensed has increased, from 350 in 2016 to 427 in 2021, indicating expanded treatment access and/or increasing need for treatment. The number of Medicaid

beneficiaries and uninsured individuals served by opioid use disorder treatment programs increased from 132 in 2013 to 232 in 2021. The rate of individuals served by treatment programs was higher in Person County (587.5) compared to NC (463.7) and lower than Bladen County (861.8) in 2021 (80).

The Centers for Medicare and Medicaid track the prescribing rates of physicians participating in the Medicare Part D plan. In 2019, there were 79 Part D prescribers in Person County, and 57 of them (72%) prescribed opioids. Those 57 providers filed 4,373 opioid claims and 267 long-acting opioid claims. When examined by rate, Person County demonstrated a higher



opioid prescribing rate (2.82) compared to Bladen County (1.08), but lower compared to NC (5.13) and the US (4.11). The long-acting opioid prescribing rate (6.11) was also higher compared to Bladen County (5.26) but lower than NC (12.03) and the nation (11.02). Since 2014, there were 2.6% fewer opioid claims, and 5% fewer long-acting opioid claims filed in Person County (81).

Drug abuse ranked as the most important unhealthy behavior impacting well-being among respondents (81%) to the 2022 Person County Community Health Survey, followed by alcohol abuse (67%). It is worth noting that 19% of respondents, who skewed female, well-educated, and with higher incomes, reported binge drinking one or more times in the past month. Thirteen percent of respondents reported that they or someone they know used an illegal drug or took a prescription drug that was not prescribed to them (22).

## COVID-19 PANDEMIC

On March 16, 2020, Person County Government issued a Declaration of Emergency and increased its Emergency Operations Center (EOC) to "operations level" to respond to the new Coronavirus (COVID-19) in the United States and State of North Carolina. Local public health response efforts began even prior to this declaration.

Person County Government and local public health operations were considerably impacted by the pandemic. Local government operations were altered through building closures; employees transitioning to teleworking or altered schedules; providing some services virtually and limiting in-person services; providing COVID-19 leave to employees; adapting physical environments to protect employees and the people served; instituting screenings before allowing entry into county buildings; following state orders in regard to face coverings, gathering limits, and social distancing; etc. Person County Health Department (PCHD) established a Joint

Information Center with community partners to communicate information to each other as well as the public. Many partnerships were established for local response efforts. PCHD contracted with the NC Public Health Alliance and Community Care of NC to hire staff to help with case investigation, contact tracing, call center operations, and numerous vaccination efforts. Person County Medical Reserve Corps (PCMRC) volunteers as well as spontaneous volunteers were utilized to help with the call center and various vaccination efforts. Additionally, Person County was impacted by COVID-19 through school closures (virtual and hybrid learning); the cancellation of various functions; church closures and that of many other organizations; business closures and restrictions; etc.

Person County's first confirmed case of COVID-19 was reported on March 24, 2020. The County's first death occurred on April 27, 2020. In March 2020, PCHD set up a COVID-19 phone line. From March through December 2020, this line received 1,171 calls. In January 2021, a call center was established, utilizing numerous staff and volunteers, to respond to vaccine inquiries as well as to schedule vaccine appointments. From January through April 2021, over 11,000 calls were fielded through the call center. The first local COVID-19 vaccination clinic was held on December 31, 2020. On January 13-14, 2021, a mass drive through vaccination clinic occurred in the parking lot of a local multiplex entertainment facility. Over 1,200 people were vaccinated at this event. In order to vaccinate a greater number of individuals at a time, the majority of clinics were held off-site at larger facilities. Vaccination clinics required collaboration with many partners, both traditional and non-traditional to public health.

In 2021, Person County's local COVID-19 response efforts continued to focus on case investigation, contact tracing, testing, media/messaging campaigns around preventive measures, and providing guidance to community partners. While all of these efforts were extremely important, the priority for the year was providing vaccinations to anyone eligible. Planning, preparing for, and operating vaccination clinics was very labor intensive for public health staff and community partners. It was necessary to seek assistance from Community Care of North Carolina, PCMRC, the Green Rural Renewal Organization, and other community volunteers. With the emergence of the Delta variant, the demand for testing drastically increased. Person Memorial Hospital's Emergency Department was overwhelmed with individuals seeking COVID-19 testing. In efforts to reserve ED services for true emergencies, PCHD collaborated with the North Carolina Department of Health and Human Services, OptumServe, and Person Memorial Hospital to establish a community-testing site. Shortly after the closure of the testing site in September 2022, PCHD began to make available COVID-19 At-Home Test Kits free of charge to the public.

By 2022, most of the COVID-19 vaccination clinics were moved back to the Person County Human Services facility or within the Health Department. Later in the year,

there were some community-based clinics held in response to the release of the bivalent vaccine.

COVID-19 had clear and continuing impacts on many elements of daily life, including the ability to access medical care. COVID-19 did not seem to be a significant barrier to receiving preventive healthcare like routine checkups or cancer screenings, with less than 4% of community health survey respondents delaying blood pressure checks, mammograms, or dental visits due to COVID-19. However, among respondents who did not get needed medical care at some point in the past year, COVID-19 was cited as an access issue by 22% (22).

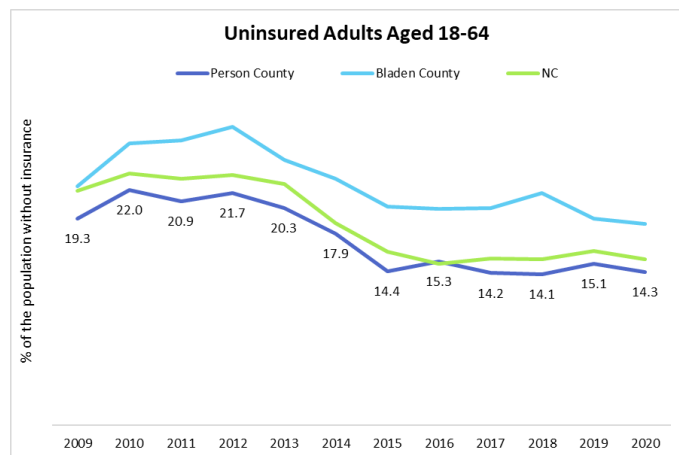
## HEALTH RESOURCES

Access to and utilization of healthcare is affected by a range of variables including the availability of health insurance coverage, availability of medical and dental professionals, transportation, cultural expectations, and other factors.

### HEALTH INSURANCE

In most communities, citizens' utilization of healthcare services is related to their ability to pay for those services, either directly or through private or government health insurance plans and programs. People without health insurance are often the segment of the population least likely to seek and/or to be able to access necessary health care.

The proportion of the working age population (18-64) without health insurance in Person County decreased from a high point of 22.0% in 2010 to 14.3% (approximately 3,300 individuals) in 2020. Historically, Person County tends to demonstrate lower rates of uninsured adults compared to NC and Bladen County. The percent of children who are uninsured is *lower* than the percent of adults: in 2020 an estimated 6% of Person County's population under age 19 did not have health insurance; statewide, 5.3% of children under 19 are uninsured (82).

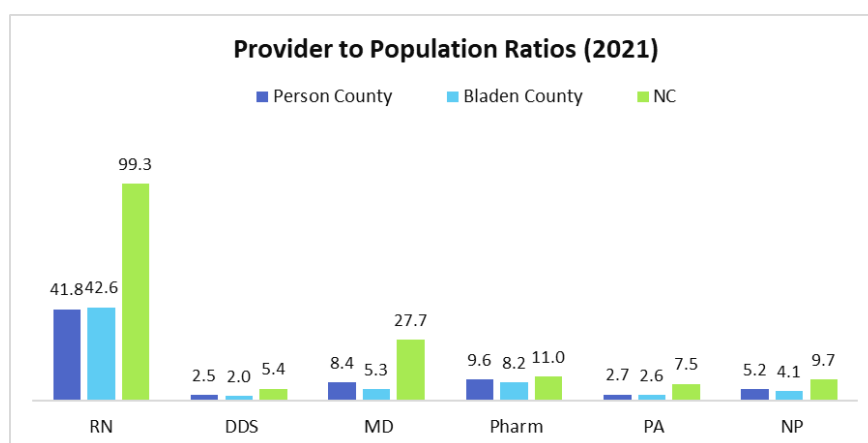


In SFY2021, approximately 26% of the Person County population, more than 10,700 individuals, was eligible for Medicaid. By September of 2022, 11,300 individuals were enrolled in Medicaid programs in Person County. The largest Medicaid program in

the county was Temporary Aid to Need Families/Aid to Families with Dependent Children (TANF/AFDC) with 3,328 people enrolled, followed by Infants and Children (1,755 eligibles), and Disabled (1,470 eligibles). A total of 1,233 children were eligible for Children’s Health Improvement Program (CHIP) or its expansion program Medicaid-Children’s Health Improvement Program (MCHIP) in FY2021, higher than any of the previous six years. By September 2022, that number had increased to 1,268 (83).

## HEALTH CARE PROVIDERS

According to NC Health Workforce data from the Cecil B. Sheps Center for Health Services Research, there were 34 physicians, 10 dentists, 169 registered nurses, 11 physician assistants, 39 pharmacists, and 21 nurse practitioners active in Person County in 2021. In 2021, Person County had lower ratios of providers to population for major groups of health care professionals compared to NC, indicating that there are fewer licensed, active providers available to serve the population compared to the average county.



As the workforce of health professionals ages and providers approach retirement, office hours often shorten, and providers may be less likely to accept new patients. Rural areas tend to face the challenge of attracting new, younger providers to replace the retiring physicians. In 2021, 40% of Person County’s dentists, 24% of physicians, and 15% of pharmacists were over the age of 65 (84).

More than 73% of respondents to the 2022 Community Health Survey seek care from a doctor’s office when they are sick; 11% go to an urgent care facility when sick. Just over 5% reported that they do not usually get healthcare when sick. Approximately 32% reported that they usually seek healthcare services outside the county. When asked if there was a time in the past year when they needed but could not get healthcare, 24% reported not being able to get medical care, 23% could not get needed dental care, and 17% could not get a necessary prescription filled. Among



those who could not get needed medical care, the primary barrier was that it took too long to get an appointment (25%) followed by not being able to afford care (21.5%). High cost of care was also cited as the primary reason for not getting dental care or a medically necessary prescription. When asked to identify the five service issues they felt had the greatest overall impact on quality of life in Person County, the affordability of health services ranked third, with 50% of respondents selecting it. A third of respondents chose lack of health insurance, and a quarter of respondents chose lack of health care providers (22).

## HEALTH CARE FACILITIES

### Hospital

The town of Roxboro is home to Person Memorial Hospital, a Duke LifePoint Hospital, which offers comprehensive health services and focuses on “Caring, Kindness and Compassion”. The facility is licensed for 98 beds, including 38 acute care beds and 60 extended care (skilled nursing facility) beds. The hospital provides both inpatient and outpatient services, including an emergency department, a newly renovated intensive care unit, and an acute care unit of private rooms. Surgical services for all ages include general, gastrointestinal, orthopedic, eye, and ear, nose, and throat surgeries and utilize four, fully digital operating rooms. They do not currently offer labor and delivery services, so pregnant women need to travel out of the county to give birth (85).

### Emergency Department Utilization

According to de-identified data provided by Person Memorial Hospital, a total of 43,193 patients were discharged from the emergency department (ED) in 2019 through 2021, 36,544 of which were Person County residents. *Only discharges of Person County residents will be described in the next section.*

Over the three years presented below, males utilized the ED in slightly lower proportion compared to the overall population: males comprised 42% of ED discharges and 48% of the 2020 county population. Approximately 58% of ED discharges were female, while females comprised 52% of the Person County population in 2020. Pediatric patients (under 18) comprised 14% of ED discharges, and 21% of the county was under the age of 18 in 2020. Adults (age 18-64) comprised 63% of ED discharges and 59% of the county population. Seniors (aged 65 and older) accounted for 23% of ED discharges in 2019-2021 and 20% of the Person County population in 2020.

ED Discharges from PMH, by Gender and Age Group						
Year	Females	Males	Under 18	18-64	Over 65	Total Annual Discharges
2019	7,768	5,530	2,255	8,288	2,758	13,301
2020	6,627	4,813	1,336	7,387	2,717	11,440
2021	6,653	5,150	1,551	7,353	2,899	11,803
Total	21,048	15,493	5,142	23,028	8,374	36,544
Average	7,016	5,164	1,714	7,676	2,791	12,181

### PMH Inpatient Hospitalization Utilization

As displayed in the table below, Person Memorial Hospital sees many fewer inpatient (IP) hospitalizations compared to ED discharges: in 2019 through 2021, a total of 2,705 people were discharged from inpatient care, 2,248 of which were Person County Residents. *Only discharges of Person County residents will be described in the next section.*

While not as pronounced a disparity as with ED utilization, males also comprised a lower proportion of IP discharges compared to the composition of the total population of Person County in 2020. Approximately 45% of IP discharges were male, compared to 48% of the county. Females comprised a higher proportion of IP discharges: 55% of discharges and 52% of the 2020 county population.

When stratified by age, IP hospitalizations in 2019-2021 look starkly different compared to the total Person County population. No pediatric IP hospitalizations occurred in the years presented. Seniors comprised 20% of the county population in 2020 and 58% of IP discharges in 2019-2021. While 60% of the population was an adult (18-64), 42% of IP discharges occurred among this age group.

IP Discharges from PMH, by Gender and Age Group						
Year	Females	Males	Under 18	18-64	Over 65	Total Annual Discharges
2019	437	336	0	331	445	776
2020	474	368	0	329	513	842
2021	332	298	0	287	343	630
Total	1,243	1,002	0	947	1,301	2,248
Average	622	501	0	474	651	1,124

## Health Department

Person County has provided public health services since 1929. The current facility in Roxboro opened in 2005, and is co-located with the Department of Social Services and Freedom House Recovery Center. The Environmental Health Section is housed in a different building. The Health Department offers a wide variety of services including: family planning, care management for at risk children and high risk pregnancies, immunizations, maternal health, health education, diabetes prevention, newborn home visits, communicable disease services, STI services, emergency preparedness, and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) programs, as well as environmental health services such as well water testing, septic and waste water services, and restaurant inspections (86).

## Federally Qualified Health Center

Person Family Medical Center, Inc. is located in Roxboro and is a designated FQHC. The facility provides comprehensive primary and preventive care to people of all ages, regardless of their ability to pay. They accept private insurance, Medicare, and Medicaid, as well as the uninsured, and offer a sliding scale discount program for patients. Services include well-visits for adults and children, prostate cancer screening and mammograms, vision and hearing screenings, sports physicals, worker's compensation evaluations, and behavioral health (including via tele-health). Dental services range from basic services like cleanings, x-rays, sealants and fillings to extractions, dentures, crowns, and oral cancer screenings (87).

In 2021, the Person Family Medical Center, Inc. served 7,522 patients, including 3,345 dental patients, 1,687 mental health patients, and 440 substance use disorder patients. Adults aged 18-64 comprise 59% of their patients, with pediatric patients (14%) and seniors (26%) accounting for the rest. Approximately 48% were of Black/African American and 6% were Hispanic or Latino. More than three quarters of patients fell below the 200% Federal poverty guideline and 62% fell below the 100% poverty line. Approximately 47% of the patients seen in 2021 were uninsured, 21% were Medicaid or CHIP patients, and 12% were Medicare patients (88).

## Emergency Medical Services

Established more than 40 years ago, the Person County Emergency Medical Services (EMS) division is a county government-owned-and-operated medical service. Bases located strategically around the county deploy advanced life support paramedic units (89). According to call response summaries provided by Person County EMS for FY2018-19 through FY21-22, the agency responded to more than 26,000 calls over the four-year period, an average of more than 6,500 per year. The most frequent types of calls tend to be: "sick person" (24.6%), falls (22.9%), and breathing problems (19.5%) (90).

## School Health

As of the 2019-2020 school year, Person County's school nurse-to-student ratio was at or below the recommended standard of 1 nurse to 750 regular education students (91). According to the Person County Schools nurse contact list, 8 school nurses were listed with the county as of 2022 (92). Student's needs range from first aid for cuts, acute illness nursing, and hygiene counseling to chronic disease management, grief counseling, and suicide prevention. In SY2018-19, the most common health conditions addressed by school nurses was asthma (348 students served), followed by Attention Deficit Disorder/Attention Deficit Hyperactivity Disorder (ADD/ADHD) (243 students seen), and severe allergies (151 students served) (93).

## Long-Term Care Facilities

As of September 2022, there was one state-licensed nursing home offering 140 skilled nursing beds and five adult care home beds. Person Memorial Hospital maintains an additional 60 licensed skilled nursing beds. Three adult care homes offer 214 beds between them, and eight family care homes are licensed for a total of 43 beds. All but one facility (a 6-bed family care home) are located in Roxboro (94). According to the 2022 State Medical Facilities Plan, with the in-county nursing home facilities projected to operate at 78.5% capacity, there is no need for additional beds by 2025 (95).

## Home Care, Home Health and Hospice Services

An alternative to institutional care preferred by many disabled and senior citizens is to remain at home and use community in-home health and/or home aide services. As of September 2022, there were 6 licensed home care, home health or hospice agencies in Person County, all of them located in Roxboro, providing a range of services, from companions, sitters, and respite caregivers to infusion nursing care, medical social services, occupational, physical and speech therapy, and hospice home services (96). This report prefers to cite only those in-home health and/or home aide services that are licensed by the state of NC. Note that there may be additional providers in Person County that refer to themselves as "home health service (or care) providers" that are *not* licensed by the state.

## Mental Health Services Providers and Service Facilities

At the time this report was prepared, the local management entity/managed mental health care organization (LME/MCO) for Person County was Vaya Health, which consolidated with Cardinal Innovations Healthcare and now serves a total of 31 counties in NC. There is a toll-free 24/7 Behavioral Health Crisis phone line, a downloadable Provider Director, and an online search tool the public can use to look for services and support for mental health, developmental disabilities, and substance abuse in their community. While Vaya operates walk-in centers for medication management, individual and group therapy, and other services, they do not currently have one located in Person County (97).

As of September 2022, there were 31 state-licensed mental health facilities in Person County offering a range of services, including supervised living and vocational programs for developmentally disabled adults, supervised living and psychosocial rehabilitation for adults with mental illness, and community respite services. Two of the listed facilities are licensed by the state to provide substance abuse services, including outpatient and inpatient programs (98).

Respondents to the 2022 Person County Community Health Survey were asked where they would refer friends or family members with mental health or substance use concerns. More than 40% would recommend crisis hotlines or a doctor, 35% a private counselor or therapist, and 33% a minister or religious official. Approximately 27% would refer someone to Freedom House Recovery Center and 25% would suggest Person Family Medical Center, Inc.'s Behavioral Health group. The lack of counseling, mental health services, and support groups ranked as the second most critical service issue in Person County, with 54% of respondents choosing it from the list of options (22).

## Other Healthcare Resources

As of September 2022, there were no independent, free-standing ambulatory surgical facilities in Person County (99). There is only one Medicare-approved dialysis facility in the county (operated by Davita, a for-profit company), with 37 hemodialysis stations (100). As noted previously in this document, with kidney disease mortality rates rising in Person County, diabetes prevalence remaining an issue, and high blood pressure continuing to be prevalent among the population, the need for life-saving kidney dialysis could be expected to increase.

## 2-1-1 CALLS

Local public health, behavioral health, and social service agencies, as well as local providers, refer clients to 2-1-1. 2-1-1 can be an important resource for counties because it is an easy to remember, three-digit telephone number that connects people with important community services to meet every day needs and the immediate needs of people in crisis. It is free, confidential, and available 24 hours a day, through the internet or calling toll-free from any landline or cell phone.

Among Person County residents, housing and shelter, utility, food, and employment and income related calls tend to be the most common.

Between 2018 and 2021, rent assistance and information about low-cost housing were the most common housing related requests. Assistance with electric utilities was the most common type of Utilities request. Within the Food category, information about food pantries and help buying food were the most frequent requests. Among those

calling for help with employment income, the most common request was for financial assistance (101).

<b>Top 2-1-1 Request Categories</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>Total</b>
<b>Housing &amp; Shelter</b>	<b>55</b>	<b>59</b>	<b>126</b>	<b>269</b>	<b>509</b>
<i>Shelters</i>	14	12	11	39	76
<i>Low-cost housing</i>	17	15	21	75	128
<i>Home repair/maintenance</i>	10	6	6	5	27
<i>Rent assistance</i>	25	18	80	140	263
<i>Mortgage assistance</i>		7	6	4	17
<i>Landlord/tenant issues</i>			2	6	8
<b>Food</b>	<b>17</b>	<b>6</b>	<b>41</b>	<b>10</b>	<b>74</b>
<i>Help buying food</i>	3		18	2	23
<i>Food pantries</i>	12	6	23	7	48
<i>Soup kitchens and meals to go</i>	1				1
<i>Feeding children</i>					0
<i>Home-delivered meals</i>	1			1	2
<b>Utilities</b>	<b>36</b>	<b>34</b>	<b>89</b>	<b>125</b>	<b>284</b>
<i>Electric</i>	29	26	68	82	205
<i>Gas</i>	3	5	1	7	16
<i>Water</i>	2	1	5	11	19
<i>Heating Fuel</i>	1		1	3	5
<i>Phone/Internet</i>		1	1	1	3
<i>Other</i>	1		13	17	31
<b>Healthcare (including COVID)</b>	<b>8</b>	<b>6</b>	<b>23</b>	<b>20</b>	<b>57</b>
<i>Health insurance</i>	1		1	3	5
<i>Medical expense assistance</i>	2	1	1	3	7
<i>Medical providers</i>	2		3	0	5
<i>Dental &amp; eye care</i>	2		0	2	4
<i>Prescription medications</i>		2	1	3	6
<i>Nursing home &amp; Adult Care</i>		4		6	10
<i>Death related</i>					0
<i>Public Health &amp; Safety</i>			3		3
<i>COVID related</i>			12	3	15
<i>Contact information</i>					0
<i>Other</i>	1		2		3
<b>Mental Health &amp; Addictions</b>	<b>4</b>	<b>3</b>	<b>11</b>	<b>3</b>	<b>21</b>
<b>Employment &amp; Income</b>	<b>8</b>	<b>5</b>	<b>27</b>	<b>26</b>	<b>66</b>
<i>Job search</i>	1	1	0	1	3
<i>Job development</i>			1		1
<i>Unemployment benefits</i>			5	2	7
<i>Tax preparation</i>			1	3	4
<i>Financial Assistance</i>	7	4	20	18	49
<i>Other</i>				2	2
<b>Clothing &amp; Household</b>	<b>3</b>	<b>8</b>	<b>1</b>	<b>2</b>	<b>14</b>
<b>Child Care &amp; Parenting</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>2</b>

Government & Legal	4	2	15	9	30
Transportation Assistance	1	6	3	8	18
Education	0	0	0	2	2
Disaster	8	1	29	1	39
Other	13	21	20	19	73
Total for top requests	169	152	385	494	1,200



## PERSON COUNTY PROGRESS TOWARD HEALTHY NC 2030 GOALS

Health Indicator	Person	Year	2030 Target	Initial NC (Year)
<b>Individuals Below 200% Federal Poverty Level</b>	30.2%	2020	27.0%	31.3% (2021)
<b>Unemployment disparity ratio</b>	2.9 Black/White ratio 0 AIAN/White ratio	2020	reduce disparity ratio to <1.7	2.1 Black/white 1.8 AIAN/white (2017)
<b>Short term suspensions per 10 students</b>	0.13	SY20-21	0.80	1.39 (SY17-18)
<b>Incarceration Rate per 100,000 population</b>	349.5	2021	150	286.6 (2020)
<b>Adverse Childhood Experiences (2 or more among children)</b>	not available at county level		18.0%	23.6% (2016-17)
<b>Third Grade Reading Level Proficiency</b>	41.00%	SY20-21	80.0%	56.8% (SY18-19)
<b>Access to Exercise Opportunities</b>	33%	2022	92%	68% (2022)
<b>Limited Access to Healthy Food</b>	not available at county level		5%	7% (2015)
<b>Severe Housing Problems</b>	15.0%	2021	14.0%	15.0% (2021)
<b>Drug Overdose Deaths per 100,000 population</b>	27.6	2016-2020	18.0	39.8 (2021)
<b>Tobacco Use - Youth</b>	not available at county level		9.0%	19.8% (2017)
<b>Tobacco Use - Adult</b>	not available at county level		15.0%	22.6% (2020)
<b>Excessive Drinking</b>	not available at county level		12.0%	15.6% (2020)
<b>Sugar-Sweetened Beverage Consumption - Youth</b>	not available at county level		17.0%	33.6% (2017)
<b>Sugar-Sweetened Beverage Consumption - Adult</b>	not available at county level		20.0%	35.4% (2019)
<b>HIV Diagnosis per 100,000 population</b>	8.8	2020	6.0	15.6 (2019)
<b>Teen (age 15-19) Birth Rate per 1,000 population</b>	not available at county level		10.0	18.7 (2018)
<b>Uninsured (Under age 65)</b>	12.2%	2020	8.0%	10.4% (2021)
<b>Early Prenatal Care</b>	68.5%	2020	80.0%	73.8% (2021)
<b>Suicide Mortality Rate per 100,000 population</b>	16.7	2016-2020	11.10	13.3 (2021)
<b>Infant Mortality per 1,000 births</b>	9.5	2016-2020	6.0	6.9 (2020)
<b>Life Expectancy in Years</b>	75.9	2018-2020	82.0	78.1 (2019)
<b>Primary Care Clinicians (Number of Counties with less than 1,500 population per Primary Care Clinician)</b>	1 to 427 ratio	2021	25% decrease for counties above 1:1500	62:1 (2017)

Source: North Carolina Institute of Medicine. Healthy North Carolina 2030 Scorecard. Available at <https://schs.dph.ncdhhs.gov/units/ldas/hnc.htm>

## COMMUNITY PRIORITIES

### PRIORITY SELECTION PROCESS

After receiving primary and secondary data reports from the Public Health Consultant, the CHA Team was involved in a series of meetings to work towards establishing priorities. The importance of broad community involvement from the public, stakeholders, partners, and diverse populations was emphasized. It was concluded that the most feasible way to achieve this was to use a priority setting survey. The intent was that the survey would serve a dual purpose. It would be used as a means to reveal some of the CHA data as well as to gather further input that could be used towards determining priorities. Survey Monkey was the tool used to create the survey, collect data, and analyze the responses. The survey was made available electronically and via hard copy through various websites, Facebook pages, email distribution lists, in person meetings, and community events. Hard copies were placed at several sites and were available by calling the Health Department. The survey was conducted via interview style with non-English speaking Hispanic/Latino/Spanish individuals at a community event sponsored by Person County Partnership for Children. Information was published in the local newspaper about where readers could access a hard copy of the survey or the survey link.

The team made efforts towards obtaining survey responses from demographics that mirrored that of the county. This was a challenge as the turnaround time for survey completion was relatively short. There were a little over 450 surveys completed, which was an increase from responses collected in 2018. The survey generated responses from both elected and appointed county officials. Most responses were from females. The Hispanic/Latino/Spanish community was well represented, as was the Native American population. Both of these successes are attributed to partners within the Hispanic/Latin/Spanish and Native American communities. Underrepresented age groups included the 18-19 category as well as those 60 and over. Additionally, the African-American population was underrepresented in this survey.

In late November 2022, the CHA Team met to review existing data. That which was reviewed and discussed at length included:

- County mortality and morbidity data and how it compared to a peer county (Bladen County) and the state.
- County rates compared to the previous assessment to identify disparities and any trends.
- Community health survey data from earlier in 2022 and how it compared to previous CHA surveys.

Prioritization methods used by the team included adaptations of a Multi-voting Technique and the Hanlon Method. A Multi-voting Technique is typically used when a

long list of health issues/problems must be narrowed down to a top few. The Hanlon Method takes into consideration defined criteria and feasibility factors.

An initial list of issues/problems was established by the group from which to work: overweight/obesity, infant mortality, lack of parenting skills, lack of physical activity, lack of physical activity facilities, smoking/tobacco use, diabetes, education (disease prevention), teen pregnancy, healthy eating, access to healthy foods, mental health, substance abuse, ACEs, suicide, neglect and abuse, violent/angry behavior, housing, income, child care, broadband, transportation, alcohol abuse, issues in school, chronic diseases (diabetes, stroke, heart disease, cancer), and Alzheimer's disease. That lengthy list was then narrowed down to the following 11 issues:

- |   |  |
|---|--|
| 1. Overweight/obesity   | 7. Heart disease   |
| 2. Lack of physical activities/facilities                           | 8. Cancer  |
| 3. Substance abuse (drug abuse, alcohol abuse, smoking/tobacco use) | 9. Teen pregnancy  |
| 4. Alzheimer's disease  | 10. Healthy eating/access to healthy foods                                       |
| 5. Diabetes   | 11. Mental health (suicide, neglect and abuse, violent and angry behavior, ACEs) |
| 6. Stroke   |  |

A Problem Importance Worksheet was useful in helping the group rate each issue/problem based on the following criteria:

1. **Magnitude:** How many persons does the issue/problem affect, either actual or potential?
2. **Seriousness of Consequences:** What degree of disability or premature death occurs because of the issue/problem? What are the potential burdens to the community if the issue/problem is not addressed?
3. **Feasibility of Correcting:** Is the issue/problem amenable to interventions? What resources of equipment, expertise, personnel, partnerships, funding, community support, etc. are necessary to address the issue/problem? Are those resources available or can they reasonably be acquired?

Other factors taken into consideration by the team when rating problems included:

- Does the issue/problem fall in line with any of the Healthy North Carolina 2030 indicators?
- What keeps recurring in the primary and secondary data?
- What evidence-based strategies, programs, or initiatives might address the issue/problem?

- What is the county's capacity to address the issue/problem?
  - Availability of personnel (professional or volunteer)
  - Availability of expertise
  - Commitment of partners
  - Availability of time
  - Availability of technology, equipment, or supplies
  - Availability of funding (direct or in-kind)
  - Community support

## PRIORITIES

Once the priority setting survey closed, the CHA Team reviewed the results and factored them into the ratings with everything else. After lengthy discussion and careful consideration, the Team concluded that the priorities for the next four years would be **Overweight/Obesity** and **Substance Abuse**.

## PRIORITY 1: OVERWEIGHT/OBESITY

### Health Indicators

Obesity and overweight are precursors to chronic diseases like diabetes, heart disease and kidney disease, several of which are prevalent in Person County where they result in high mortality rates and numerous hospital admissions. It is a condition that complicates many other diseases and was discovered to be a critical risk factor for poor outcomes with COVID-19 infections.

As cited previously in this report, according to CDC data, the prevalence of diagnosed obesity in Person County was 22.3% in 2019 and averaged 25.5% over the period from 2006 through 2019. Results from the 2022 Person County Community Health Survey showed that 52% of respondents reported that they had been diagnosed as either overweight or obese. Among Person County women who gave birth in 2020, 65% had pre-pregnancy BMIs in the overweight or obese range. In 2016, 2017 and 2018, approximately 30% of 2-to-4-year old children served in WIC and Child Health Clinics were assessed to be overweight or obese.

Obesity/Overweight has been a consistent theme among survey respondents asked to consider the issues facing residents of Person County. More than 50% of survey respondents over the past five survey samples identified it as a leading healthy problem in the county. Lack of exercise and poor eating habits are seen as critical risk factors, with more than 50% of respondents in 2022 identifying each as impactful unhealthy behaviors. Approximately 39% of respondents felt that the lack of recreational facilities and the availability of healthy food choices impacted the well-

being of Person County residents. More than half of respondents indicated that they do not get the recommended amount of weekly physical activity.

Also as noted previously, diabetes, a chronic disease closely related to obesity, was the sixth leading cause of death overall in Person County in 2016-2020, with a mortality rate that surpassed the state rate by 25% and had increased 12% since 2001-2005. As previously cited, CDC data estimated the prevalence of diagnosed diabetes among adults aged 20 and older in Person County at 8% in 2019, with an average prevalence of 9% over the period from 2006 through 2019. Sixteen percent of the respondents to the 2022 Person County Community Health Survey reported having received a medical diagnosis of diabetes, and 25% had been diagnosed with pre/borderline diabetes.

### Specific Populations at Risk

**The poor and uninsured.** Obesity is sometimes, but not exclusively, associated with poverty, as the economically disadvantaged often do not have the same access to healthy food and lifestyle choices as wealthier persons. Members of the community who lack health insurance are always at-risk for poor health outcomes. According to 2020 estimates, 16% of the Person County population lives below the federal poverty level, with higher proportions of children and Black, Indigenous, People of Color (BIPOC) residents living in poverty. Fourteen percent of adults (aged 18-64) in Person County lacked health insurance in 2020.

**Children.** As a behavior-related health outcome, obesity affects all cross-sections of society, but we do know that habits—good and bad—learned and practiced at a young age can make a difference, which would point to children as perhaps the population most vulnerable to obesity and its life-long effects. Over three years of assessments, a consistent 30% of Person County 2 to 4-year olds were overweight or obese. Food insecurity rates tend to be higher among children, with 24% of Person County children estimated to lack access to enough food for an active, healthy life in 2020.

**Adults.** While the public is clearly aware of both the prevalence of and risk factors for overweight and obesity, actually addressing the condition continues to be a challenge. While more than half of respondents having been diagnosed as overweight or obese, more than half also do not get the recommended minimum amount of weekly physical activity. Adulthood is when the impact of chronic conditions related to overweight and obesity, like high blood pressure, high cholesterol, diabetes, and heart disease begin to have a greater impact on daily life.

### Health Resources Available Addressing Overweight/Obesity

The following is a list of some of the prevention and health promotion resources in Person County. It is by no means an exhaustive list of everything available. These resources are primarily those with which public health has been involved.

**Person County Health Department.** PCHD collaborates with various community and regional partners to offer evidence-based interventions addressing chronic disease in general and more specifically diabetes and prediabetes. The department delivers the Living Healthy with Diabetes Self-Management Program. In 2017, a Diabetes Prevention Program, focusing on preventing or delaying the onset of diabetes through weight loss and physical activity, was implemented. PCHD continues to take advantage of resources as they become available to partner with other organizations to offer education and outreach around health priorities. Additionally, priorities are addressed through the Healthy Communities Program and several personal health programs.

**NC Cooperative Extension – Person County Center.** Family and Consumer Science programs offer many educational opportunities to Person County around healthy eating, physical activity, heart disease, cancer, diabetes, prediabetes, weight loss, etc. The Family and Consumer Science Agent co-facilitates both the Living Healthy with Diabetes Self-Management Program and the Diabetes Prevention Program with the Health Department.

**Healthy Personians Partnership.** Healthy Personians is a community-based partnership that strives to assist the residents of Person County with establishing and maintaining healthy lifestyles. This partnership is committed to being a resource for Person County and helping to link Personians to programs and services that will help them to be productive citizens and live long, healthy lives.

**Person County Senior Center.** PCSC offers a wide variety of health/wellness programs and resources to the community. Numerous fitness classes are offered daily along with a fully equipped fitness facility. They also recruit assistance from healthcare facilities to offer health screenings periodically. The Senior Center partners with other agencies to offer educational series around healthy eating and chronic disease prevention and management.

**Person County Recreation, Arts and Parks.** This county department provides opportunities for Personians of all ages and capabilities to be physically active. They offer group fitness classes, yoga, athletic programs, and Special Olympics, just to name a few. Recreation facilities are available all around the county and include paved walking tracks, playgrounds, gymnasiums, ball fields, etc.

**Local Farmers Markets.** There are two farmers markets in the county. Both are centrally located in the city limits of Roxboro.

**Person Memorial Hospital.** PMH provides inpatient and outpatient services. Some of the services they offer as related to Person County's health priorities include: cardiology and cardiac rehabilitation services; nutrition therapy; radiology services; surgical services; etc. The county is fortunate to have local mammography and

colorectal cancer screening services. PMH offers community education and outreach about chronic disease.

**Person Family Medical Center, Inc.** PFMC is a Federally Qualified Health Center that offers affordable and high-quality health services including primary care, dental services, nutrition counseling, diabetes education, behavioral health, and community outreach.

**Private Medical Practices.** There are several private medical practices in Person County that collaborate with the Health Department to help promote public health services and programs. Local providers participate in community outreach events and serve as guest speakers for educational programs.

**Person County Resource Guide.** The Health Department makes available a comprehensive resource guide of many services and programs in the county. A plethora of health and human services resources for all ages are listed in the guide. It is available via hard copy at the Health Department and is posted on the department's website.

## PRIORITY 2: SUBSTANCE ABUSE

### Health Indicators

As mentioned earlier, the unintentional poisoning mortality rate in Person County more than doubled from a low of 10.7 in 2011-2015 to 27.6 in 2016-2020. Between 2011 and 2020 there were 63 deaths, 238 hospitalizations, and 971 ED visits due to unintentional poisoning in Person County. Despite the decreasing number of opioids being prescribed and dispensed, opioids were a common substance contributing to these ED visits, hospitalizations, and deaths in Person County. An increasing proportion of opioid deaths across the state, including Person County, involve illicit opioids like heroin and fentanyl.

Administrations of naloxone by community-based agencies or law enforcement agencies were rare in Person County, according to the NC Opioid Action Plan Data Dashboard. The number of patients being treated with buprenorphine increased between 2016 and 2020; the number of uninsured individuals and Medicaid beneficiaries with an opioid use disorder who were served by treatment programs also increased between 2013 and 2021. Substance Use Disorder (SUD) treatment services became available only recently at the FQHC in Person County: in 2021 Person Family Medical Center, Inc. saw 440 SUD patients.

While opioids garner much of the attention and funding, alcohol and other illicit drugs remain an issue. Nineteen percent of survey respondents reported binge drinking one or more times in the past month. Among Person Memorial Hospital emergency

department discharges due to psychoactive substance use, alcohol was the most common substance involved: 56% of the 418 discharges in 2019-2022 were for alcohol use, dependence, or abuse.

As of September 2022, two agencies located in Person County were licensed by the state to provide substance abuse treatment. Both agencies provide intensive and comprehensive outpatient treatment. As described previously, respondents to the 2022 Person County Community Health Survey were asked where they would refer someone who sought help for a mental health or drug/alcohol problem: 43% would suggest a crisis hotline, 42% a doctor, and 35% a private counselor or therapist.

## Specific Populations at Risk

**The poor and uninsured.** The uninsured and those in poverty are always at risk for poor outcomes to their mental health and substance abuse problems because of access issues. In addition, it is not uncommon for persons of any age burdened by economic and other life stressors to seek “relief” in alcohol or drugs. Access to mental health/substance abuse services in this group may be poor; the stigma of being poor or uninsured compounds the already prevalent stigma of addiction disorders.

**Youth and the elderly.** Youth may initially experiment with drugs or alcohol for other reasons, including peer pressure, risk-taking, and escapism. Youth suffering from depression and other mental health problems may be especially apprehensive to share and discuss their problems with anyone, despite an increased societal awareness of mental health issues. Consequently, youth are especially likely to suffer from undiagnosed and untreated mental health problems. The elderly may fall into prescription drug abuse accidentally, resulting in severe illness or death.

**Whites.** Neither African Americans nor Hispanics comprised large percentages of the ED admissions for substance abuse at Person Memorial Hospital in 2019-2021; the vast majority were white non-Hispanic patients. The overdose death rate is much higher among white non-Hispanic residents (29.5) in Person County compared to Black (7.4) residents (102).

## Health Resources Available Addressing Substance Abuse

The following is a list of some of the prevention and health promotion resources in Person County. It is by no means an exhaustive list of everything available. These resources are primarily those with which public health has been involved.

**Person County Health Department.** PCHD collaborates with various community and regional partners to offer evidence-based interventions addressing substance use, primarily relative to tobacco use and tobacco cessation. PCHD continues to take advantage of resources as they become available to partner with other organizations to offer education and outreach around health priorities. Additionally, priorities are



addressed through the Healthy Communities Program and several personal health programs.

**Person Family Medical Center, Inc.** PFMD is a Federally Qualified Health Center that offers affordable and high-quality health services including primary care, dental services, nutrition counseling, diabetes education, behavioral health, and community outreach.

**Freedom House Recovery Center.** Freedom House Recovery Center is a non-profit behavioral health care agency that provides a broad continuum of person-centered, comprehensive services for adults and children, who suffer from behavioral issues, mental illness or addiction.

**Insight Human Services.** Insight Human Services (IHS) works with community organizations (law enforcement, school systems, health departments, community coalitions, etc.) to reduce the negative impacts of substance misuse. IHS provides evidence-based prevention programming and strategies to prevent the early onset of substance misuse.

**Community Impact North Carolina.** Community Impact North Carolina (CINC) is committed to preventing alcohol and other drug harms in North Carolina communities. CINC promotes community-centered substance misuse prevention through collaboration, education, community and environmental strategies, and policy advocacy.

**Healthy Personians Partnership.** Healthy Personians is a community-based partnership that strives to assist the residents of Person County with establishing and maintaining healthy lifestyles. This partnership is committed to being a resource for Person County and helping to link Personians to programs and services that will help them to be productive citizens and live long, healthy lives.

**Opioid Settlement Advisory Committee.** This committee, appointed by the Board of Commissioners, is charged with discussing opioid-related health concerns and issues impacting the residents of Person County. They are also responsible for advising the Board of Commissioners on options to expend funds to remedy opioid impacts. Additionally, this committee is tasked with planning and hosting an annual meeting, open to the public, to receive input on proposed uses of the settlement funds and to encourage collaboration between local governments.

**Person County First Responders.** Public health's partnerships with local first responders (law enforcement, fire services, and emergency management) extends beyond preparing for and responding to emergencies. Partners also collaborate on prevention and health promotion efforts.

**Person County Resource Guide.** The Health Department makes available a comprehensive resource guide of many services and programs in the county. A plethora of health and human services resources for all ages are listed in the guide. It is available via hard copy at the Health Department and is posted on the department's website.

## HEALTH RESOURCES NEEDED TO ADDRESS PRIORITIES

While Person County agencies do a tremendous job of pooling resources to make things happen, there is a continuous need for resources (funding, staffing, etc.) to support initiatives addressing priorities.

In previous assessments, it has been noted that there is a need for community-based nutrition and dietitian services. Unfortunately, this has not changed. Existing services are more clinic and in-house based. As chronic diseases and associated risk factors continue to be issues for many Personians, the need for dietary and nutrition consultation is imperative.

For its size, Person County has a substantial number of recreational facilities. However, there is no indoor recreational facility in the county. This has been an ongoing need for many years. A facility of this nature would make provisions for more fitness classes, an aquatics program, etc. An aquatics program would be an asset to the community especially as Person County has an aging population. Alternative fitness programs offering non-weight bearing activities will allow residents with physical limitations to be more active. More recreational programs will not only foster better physical health but mental health also.

## NEXT STEPS

Within six months of the completion of Person County's Community Health Assessment, a workgroup, consisting of community leaders, providers, and partners, will collaborate to develop a Community Health Improvement Plan (CHIP) for each of the two selected health priorities. CHIPs will focus on meeting the unmet needs of at-risk groups. CHIPs will be aligned with Healthy North Carolina 2030 focus areas, as well as standards set forth by NC Local Health Department Accreditation and the Department of Health and Human Services/Division of Public Health Consolidated Agreement. They will include evidence-based multilevel interventions targeting health behavior, the physical environment, social and economic factors, and/or clinical care and be both short-term and long-term in nature.

Community Health Improvement Plans for both priorities, demonstrating key characteristics of Results-Based Accountability, will be established and documented in Clear Impact Scorecard (online tool).

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## APPENDIX 1 – GLOSSARY OF ABBREVIATIONS & HEALTH DATA DEFINITIONS

ACS	American Community Survey, from the US Census Bureau
NC OSBM	North Carolina Office of State Budget and Management
NC SCHS	North Carolina State Center for Health Statistics
BIPOC	Black, Indigenous, People of Color
AI/AN	American Indian/Alaska Native
CY	Calendar Year
FY	Fiscal Year
SY	School Year
PMH	Person Memorial Hospital
ED	Emergency Department
IP	Inpatient
LME	Local Management Entity
IVP	Injury and Violence Prevention Branch
BRFSS	Behavioral Risk Factor Surveillance System
OD	Opioid Use Disorder
CHIP	Children's Health Insurance Program
MCHIP	Medicaid-Children's Health Insurance Program (expansion of CHIP)
TANF	Temporary Aid to Needy Families
AFDC	Aid to Families with Dependent Children
FQHC	Federally Qualified Health Center

Routinely collected surveillance data can be used to describe—and compare—the health status of communities. These data, which are readily available in the public domain, typically use standardized definitions. Some of the important terms used in this section of the report are defined or explained below, as excerpted from the consultant's comprehensive CHNA report:

- **Mortality rate** - The mortality rate, or the rate of death, is calculated by dividing the number of deaths in a target population in a given time period due to a specific cause by the total number of persons in the target population in the same period. Mortality rate typically is described as number of deaths per 100,000 persons.
- **Age-adjustment** - Many factors can affect the risk of death, including race, gender, occupation, education and income. The most significant factor is age, because as a population ages, its collective risk of death increases. In order to compare mortality data from one community with the same kind of data from another, it is necessary first to control for differences in the age composition of the communities being compared. This is accomplished by age-adjusting the data, a statistical manipulation usually performed by the professionals responsible for collecting and cataloging health data.

- **Aggregate data** – Aggregation of data combines annual data gathered over a multi-year period, usually three or five years. The practice of presenting data that are aggregated avoids the instability typically associated with using highly variable year-by-year data consisting of relatively few cases or deaths. Aggregating annual counts over a five-year period before calculating a rate is a method commonly used by the NC State Center for Health Statistics (NCSCHS). Sometimes even aggregating data is not sufficient, so the NCSCHS recommends that all rates based on fewer than 20 events—whether covering an aggregate period or not—be considered “unstable” and interpreted only with caution.
- **Morbidity** - Morbidity as used in this report refers generally to the presence of injury, sickness or disease (and sometimes the symptoms and/or disability resulting from those conditions) among the living population. Morbidity data usually is presented as a percentage or a count, but not a rate.
- **Prevalence** – Prevalence refers to the number of *existing* cases of a disease or health condition in a population at a defined point in time or during a defined period. Prevalence is usually expressed as a *proportion*, not a rate.
- **Incidence** - Incidence is the population-based *rate* at which *new* cases of a disease occur and are diagnosed. It is calculated by dividing the number of newly diagnosed cases of a disease or condition during a given period by the population size during that period. Typically, the resultant value is multiplied by 100,000 and is expressed as cases per 100,000; sometimes the multiplier is a smaller number, such as 10,000.
- **Pregnancy rate** – The pregnancy rate is the number of pregnancies per 1,000 women of target reproductive age. In this report, the target ages are “all women of reproductive age” (15-44 years) and “teen women” (15-19 years).

# Person County Community Health Survey

Person County Health Department and other agencies will use survey results to better understand and address community health needs. Answers will not be linked back to you. If you have already taken this survey on paper or electronically, **PLEASE DO NOT TAKE IT AGAIN.**

**We ask that you ONLY complete this survey if you are 18 or older AND live and/or work in Person County.**

1. Are you 18 or older? ☐ Yes (go to next question) ☐ No (please stop here)

2. Do you live and/or work in Person County? ☐ Yes (go to next section) ☐ No (please stop here)

---

3. Put a check mark next to what you think are the **FIVE (5) HEALTH PROBLEMS** that have the greatest impact on health in the Person County community. **Remember to check only FIVE (5):**

- |  |  |  |
|--|--|--|
| <input type="checkbox"/> Accidental injuries (e.g., falls, drowning, poisoning, gun accidents, etc.) | <input type="checkbox"/> Kidney disease  | <input type="checkbox"/> Sexually transmitted infections (e.g., chlamydia, gonorrhea)                      |
| <input type="checkbox"/> Alzheimer's disease   | <input type="checkbox"/> Liver Disease   | <input type="checkbox"/> Stroke  |
| <input type="checkbox"/> Cancer  | <input type="checkbox"/> Lung disease (e.g., asthma, emphysema, COPD, chronic bronchitis)                        | <input type="checkbox"/> Substance abuse (e.g., alcohol, prescription drugs, illegal drugs, tobacco, etc.) |
| <input type="checkbox"/> Dental health   | <input type="checkbox"/> Mental health (e.g., depression, anxiety, intellectual or cognitive disabilities, etc.) | <input type="checkbox"/> Teenage pregnancy   |
| <input type="checkbox"/> Diabetes  | <input type="checkbox"/> Motor vehicle accident injuries   | <input type="checkbox"/> Other (please specify): _____   |
| <input type="checkbox"/> Heart disease/heart attack  | <input type="checkbox"/> Obesity/overweight  |  |
| <input type="checkbox"/> HIV/AIDS  | <input type="checkbox"/> Pre-diabetes/Borderline Diabetes  |  |
| <input type="checkbox"/> Infant death  |  |  |
| <input type="checkbox"/> Infectious/contagious diseases (e.g., COVID, flu, pneumonia, etc.)          |  |  |

4. Put a check mark next to what you think are the **FIVE (5) UNHEALTHY BEHAVIORS** that have the greatest impact on health and safety in the Person County community. **Remember to check only FIVE (5):**

- |  |  |   |
|--|--|---|
| <input type="checkbox"/> Alcohol abuse                                     | <input type="checkbox"/> Not using child safety seats                                    | <input type="checkbox"/> Poor eating habits                             |
| <input type="checkbox"/> Drug abuse (prescription drugs and illegal drugs) | <input type="checkbox"/> Not using seatbelts   | <input type="checkbox"/> Poor preparation for disasters and emergencies |
| <input type="checkbox"/> Having unsafe sex                                 | <input type="checkbox"/> Not going to a dentist for preventive checkups and cleanings    | <input type="checkbox"/> Reckless/drunk driving                         |
| <input type="checkbox"/> Lack of exercise/poor physical fitness            | <input type="checkbox"/> Not going to the doctor for preventive check-ups and screenings | <input type="checkbox"/> Self-Harm (other than suicide)                 |
| <input type="checkbox"/> Lack of parenting skills                          | <input type="checkbox"/> Not getting prenatal (pregnancy) care                           | <input type="checkbox"/> Smoking/tobacco use/vaping                     |
| <input type="checkbox"/> Not getting vaccines ("shots") to prevent disease |  | <input type="checkbox"/> Suicide  |
|  |  | <input type="checkbox"/> Violent, angry behavior                        |
|  |  | <input type="checkbox"/> Other (please specify): _____                  |

5. Put a check mark next to what you think are the **FIVE (5) SOCIAL ISSUES** that have the greatest impact on quality of life in the Person County community. **Remember to check only FIVE (5):**

- |   |  |
|---|--|
| <input type="checkbox"/> Animal control issues/rabies   | <input type="checkbox"/> Pollution (air, water, land)  |
| <input type="checkbox"/> Crime (e.g., theft, murder, assault, etc.)   | <input type="checkbox"/> Racism/discrimination   |
| <input type="checkbox"/> Disaster preparedness (plans for natural disaster, bioterrorism, pandemic flu, etc.) | <input type="checkbox"/> Sexual harm   |
| <input type="checkbox"/> Dropping out of school   | <input type="checkbox"/> Transportation options  |
| <input type="checkbox"/> Gang activity  | <input type="checkbox"/> Unemployment/underemployment  |
| <input type="checkbox"/> Homelessness   | <input type="checkbox"/> Unsafe/unmaintained roads   |
| <input type="checkbox"/> Human Trafficking  | <input type="checkbox"/> Unsafe schools (e.g., in/at-school crime, violence, bullying, etc.) |
| <input type="checkbox"/> Low income/poverty   | <input type="checkbox"/> Other (please specify): _____                                       |
| <input type="checkbox"/> Neglect and abuse  | _____  |

6. Put a check mark next to what you think are the **FIVE (5) SERVICE ISSUES** that have the greatest impact on quality of life in the Person County community. **Remember to check only FIVE (5):**

- |   |   |
|---|---|
| <input type="checkbox"/> Availability of child care   | <input type="checkbox"/> Lack of emergency housing (shelters)   |
| <input type="checkbox"/> Affordability of health services                                       | <input type="checkbox"/> Lack of emergency services (EMS, fire, police)                                 |
| <input type="checkbox"/> Affordability of housing   | <input type="checkbox"/> Lack of/inadequate health insurance  |
| <input type="checkbox"/> Availability of healthy food choices in restaurants and grocery stores | <input type="checkbox"/> Lack of healthcare providers   |
| <input type="checkbox"/> Lack of access to high speed internet                                  | <input type="checkbox"/> Lack of recreational facilities (e.g., parks, trails, community centers, etc.) |
| <input type="checkbox"/> Lack of counseling/mental health services/support groups               | <input type="checkbox"/> Lack of transportation options   |
| <input type="checkbox"/> Lack of culturally appropriate services for minorities                 | <input type="checkbox"/> Lack of senior living facilities   |
|   | <input type="checkbox"/> Other (please specify): _____  |
|   | _____   |

7. Where do you get **most** of your health-related information or advice? Choose **only one (1)** answer.

- |   |  |                                   |
|---|--|-----------------------------------|
| <input type="checkbox"/> Friends and family | <input type="checkbox"/> Help lines            | <input type="checkbox"/> Church   |
| <input type="checkbox"/> Doctor/nurse       | <input type="checkbox"/> Newspaper/magazine/TV | <input type="checkbox"/> Internet |
| <input type="checkbox"/> Health Department  | <input type="checkbox"/> Pharmacist            | <input type="checkbox"/> Other    |
| <input type="checkbox"/> Hospital           | <input type="checkbox"/> School                |                                   |

8. Where do you go most often **when you are sick**? Choose **only one (1)** answer.

- |  |   |
|--|---|
| <input type="checkbox"/> Doctor's office               | <input type="checkbox"/> Person Family Medical and Dental Centers |
| <input type="checkbox"/> Health Department             | <input type="checkbox"/> Other                                    |
| <input type="checkbox"/> Hospital emergency department | <input type="checkbox"/> I don't usually get care when I'm sick   |
| <input type="checkbox"/> Urgent Care Center            |   |

**Remember the answers provided on this anonymous survey will not be linked back to you.**

9. Where do you go for health care (well care and/or sick care)? Choose **only one (1)** answer.

\_\_\_\_\_ Person County      \_\_\_\_\_ Outside Person County      \_\_\_\_\_ Both

10. Was there a time in the past 12 months when you needed **medical care** but could not get it? Choose **as many** answers as you need to.

- \_\_\_\_\_ No
- \_\_\_\_\_ Yes, because I couldn't afford it.
- \_\_\_\_\_ Yes, because I didn't have transportation to get there.
- \_\_\_\_\_ Yes, because I was treated unfairly because of my race, ethnicity, or sexual orientation.
- \_\_\_\_\_ Yes, because my health insurance didn't cover what I needed.
- \_\_\_\_\_ Yes, because the provider (doctor, clinic or hospital) would not take my insurance or Medicaid.
- \_\_\_\_\_ Yes, because it took too long to get an appointment.
- \_\_\_\_\_ Yes, because the doctor wasn't taking new patients.
- \_\_\_\_\_ Yes, because of COVID.
- \_\_\_\_\_ Yes, because of a language barrier.

11. Was there a time in the past 12 months when you needed a **medically necessary prescription** but could not get it? Choose **as many** answers as you need to.

- \_\_\_\_\_ No
- \_\_\_\_\_ Yes, because I couldn't afford it
- \_\_\_\_\_ Yes, because I didn't have transportation to get there.
- \_\_\_\_\_ Yes, because I was treated unfairly because of my race, ethnicity, or sexual orientation.
- \_\_\_\_\_ Yes, because I my health insurance didn't cover what I needed.
- \_\_\_\_\_ Yes, because the pharmacy would not take my insurance or Medicaid.
- \_\_\_\_\_ Yes, because the medication was not available.
- \_\_\_\_\_ Yes, because of COVID.
- \_\_\_\_\_ Yes, because of a language barrier.

12. Was there a time during the past 12 months when you needed **dental care** but could not get it? Choose **as many** answers as you need to.

- \_\_\_\_\_ No
- \_\_\_\_\_ Yes, because I couldn't afford it.
- \_\_\_\_\_ Yes, because I didn't have transportation to get there.
- \_\_\_\_\_ Yes, because I was treated unfairly because of my race, ethnicity, or sexual orientation.
- \_\_\_\_\_ Yes, because I my dental insurance didn't cover what I needed.
- \_\_\_\_\_ Yes, because the dentist would not take my insurance or Medicaid.
- \_\_\_\_\_ Yes, because it took too long to get an appointment.
- \_\_\_\_\_ Yes, because the dentist wasn't taking new patients.
- \_\_\_\_\_ Yes, because of COVID.
- \_\_\_\_\_ Yes, because of a language barrier.

13. If a friend or family member needed assistance for a **mental health or a drug/alcohol abuse problem**, who would you tell them to call or talk to? Choose **as many** answers as you need to.

- |  |   |
|--|---|
| <input type="checkbox"/> Call 911                                | <input type="checkbox"/> Person Family Medical Behavioral Health  |
| <input type="checkbox"/> Crisis hotline                          | <input type="checkbox"/> Private counselor or therapist           |
| <input type="checkbox"/> Doctor                                  | <input type="checkbox"/> School counselor, nurse or social worker |
| <input type="checkbox"/> Family/friend                           | <input type="checkbox"/> Support group (e.g., AA, Al-Anon)        |
| <input type="checkbox"/> Freedom House Recovery Center           | <input type="checkbox"/> Not sure/don't know                      |
| <input type="checkbox"/> Minister/religious official             | <input type="checkbox"/> Other (please specify): _____            |
| <input type="checkbox"/> Person Memorial Hospital Emergency Room | _____   |

14. Considering all types of **alcoholic beverages**, on how many days during the past month did you have **5 or more** alcoholic drinks on a single occasion or at one sitting? Choose **only one (1)** answer.

- ☐ None      ☐ One or two times      ☐ Three or four times      ☐ Five or more times

15. How often do you smoke cigarettes?

- ☐ Every day      ☐ Some days      ☐ Not at all

16. How often do you use smokeless tobacco (chewing tobacco, dip, snuff, etc.)?

- ☐ Every day      ☐ Some days      ☐ Not at all

17. How often do you use Electronic Nicotine Delivery products (e-cigarettes, vaping products, etc.)?

- ☐ Every day      ☐ Some days      ☐ Not at all

18. Where would you go for help if you wanted to **quit using any tobacco or vaping product**? Choose **as many** answers as you need to.

- |  |  |
|--|--|
| <input type="checkbox"/> Not applicable: I don't smoke or use any tobacco products | <input type="checkbox"/> Health Department                 |
| <input type="checkbox"/> Not applicable: I don't want to quit                      | <input type="checkbox"/> Pharmacy/over-the-counter product |
| <input type="checkbox"/> Church/religious leader                                   | <input type="checkbox"/> QuitLineNC                        |
| <input type="checkbox"/> Doctor, private counselor/therapist                       | <input type="checkbox"/> Not sure/don't know               |

***Remember the answers provided on this anonymous survey will not be linked back to you.***

**19. Have you ever been told by a doctor, nurse, or other health professional that you have any of the conditions in the following list? Please answer every question.**

Angina/heart disease	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Lung disease (emphysema, COPD, chronic bronchitis)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Cancer	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Depression or anxiety	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Diabetes (not during pregnancy)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Pre-diabetes/borderline diabetes	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
High blood pressure	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
High cholesterol	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Overweight/obesity	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know

**20. In the past year, have you:**

Had a routine/annual physical or check-up	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Delayed due to COVID
Been to the dentist/dental hygienist	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Delayed due to COVID
Had your blood pressure checked	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Delayed due to COVID
Had your cholesterol checked	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Delayed due to COVID
Had a mammogram	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A <input type="checkbox"/> Delayed due to COVID
Had a colonoscopy	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A <input type="checkbox"/> Delayed due to COVID

**21. During a normal week, other than in your daily routine at home or work, do you get at least 150 minutes of moderate physical activity a week OR 75 minutes of vigorous physical activity a week?**

☐ Yes ☐ No

**22. During the past 30 days, have you or someone you known used an illegal drug or taken a prescription drug that was not prescribed to them?**

☐ Yes ☐ No ☐ Don't know

**23. Do you keep your medicine (whether over-the-counter or prescription) in a locked place?**

☐ Yes ☐ No ☐ Some medicine is locked

**The following questions ask about events that happened during your childhood. Adverse childhood experiences affect children and families across all communities and can have long-term effects on adult health and wellness. This is a sensitive topic and some people may feel uncomfortable with these questions. At the end of this section, you will be provided phone numbers for organizations that can provide information and referral for these issues. Please keep in mind that you can skip any question you do not want to answer. All questions refer to the time period before you were 18 years of age.**

***Remember the answers provided on this anonymous survey will not be linked back to you.***



**24.** Before you were 18, did you live with anyone who was depressed, mentally ill, or suicidal?

☐ Yes ☐ No ☐ Don't know/Not sure

**25.** Before you were 18, did you ever live with anyone who was a problem drinker or alcoholic?

☐ Yes ☐ No ☐ Don't know/Not sure

**26.** Before you were 18, did you live with anyone who used illegal street drugs or who abused prescription medications?

☐ Yes ☐ No ☐ Don't know/Not sure

**27.** Before you were 18, did you live with anyone who served time or was sentenced to serve time in a prison, jail, or other correctional facility?

☐ Yes ☐ No ☐ Don't know/Not sure

**28.** Before you were 18, were your parents separated or divorced?

☐ Yes ☐ No ☐ Don't know/Not sure

**29.** Before you were 18, how often did your parents or adults in your home ever slap, hit, kick, punch, or beat each other up?

☐ Never ☐ Once ☐ More than Once ☐ Don't know/not sure

**30.** Not including spanking, how often did a parent or adult in your home ever hit, beat, kick or physically hurt you in any way before you were 18?

☐ Never ☐ Once ☐ More than Once ☐ Don't know/not sure

**31.** Before you were 18, how often did a parent or adult in your home ever swear at you, insult you, or put you down?

☐ Never ☐ Once ☐ More than Once ☐ Don't know/not sure

**32.** Before you were 18, how often did anyone at least 5 years older than you, or an adult, ever touch you sexually?

☐ Never ☐ Once ☐ More than Once ☐ Don't know/not sure

33. Before you were 18, how often did anyone at least 5 years older than you, or an adult, force you to have sex?

☐ Never      ☐ Once      ☐ More than Once      ☐ Don't know/not sure

**Person Family Medical Behavioral Health:** 336-599-9271 x 239

**Freedom House Recovery Center:** 336-599-8366

**Vaya Health 24/7 Crisis & Referral:** 1-800-849-6127

34. Are the hours of operation for Person County Health Department's main facility (on Madison Blvd., Roxboro) convenient for you? (Monday-Friday from 8:00 a.m. to 4:30 p.m.) Choose **only one (1)** answer.

☐ Yes      ☐ No      ☐ If no, explain: \_\_\_\_\_

35. Are the hours of operation for Person County Health Department's Environmental Health facility (on Morgan St., Roxboro) convenient for you? (Monday-Friday from 8:30 a.m. – 5 p.m.) Choose **only one (1)** answer.

☐ Yes      ☐ No      ☐ If no, explain: \_\_\_\_\_

36. The Person County Health Department offers many services (i.e. services around family planning, maternal health, WIC, case management for at-risk pregnancies and children, shots/vaccines, communicable diseases, sexually transmitted infections, health education, environmental health, emergency preparedness, vital record registration, etc.). If you think there are other public health services that are needed to meet the needs of our community, please briefly mention here. If there are none, go to the next question.

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37. If you have used any Person County Health Department services **within the past 5 years**, please rate your overall experience.

☐ Very Satisfied      ☐ Satisfied      ☐ Dissatisfied      ☐ Very Dissatisfied

☐ I have not used any Person County Health Department services within the past 5 years.

If you were dissatisfied with any of the Person County Health Department services received in the past 5 years, please briefly explain:

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**We have a final set of questions about you. These are questions that help us understand how different types of people view different health issues.**

**38.** What is the ZIP code of your PRIMARY residence in **Person County**? Check **only one (1)**.

☐ 27291    ☐ 27343    ☐ 27565    ☐ 27573    ☐ 27583    ☐ 27305  
☐ 27541    ☐ 27572    ☐ 27574    ☐ I work in Person County but live in another county.

**39.** How old are you?

☐ 18-19    ☐ 40-49    ☐ 65-69    ☐ 85 or older  
☐ 20-29    ☐ 50-59    ☐ 70-79  
☐ 30-39    ☐ 60-64    ☐ 80-85

**40.** How do you describe yourself?    ☐ Male    ☐ Female    ☐ Other

**41.** Which of the following best describes you? Check **only one (1)**.

☐ Heterosexual (straight)    ☐ I describe my sexual identity some other way.  
☐ Gay or lesbian    ☐ I'm not sure about my sexual identity.  
☐ Bisexual    ☐ I'd rather not say.

**42.** Are you of Hispanic, Latino, or Spanish origin?    ☐ Yes    ☐ No

**43.** What do you consider your race? Please check **only one (1)** answer.

☐ White only  
☐ Black/African American only  
☐ Hispanic or Latino  
☐ Native American/American Indian/Alaska Native only  
☐ Asian (Indian, Pakistani, Japanese, Chinese, Korean, Vietnamese, Filipino/a) only  
☐ Pacific Islander (Native Hawaiian, Samoan, Guamanian/Chamorro) only  
☐ Other race not listed here  
☐ Two or more races

**44.** What is the **highest** level of school, college or training that you have finished? Choose **only one (1)** answer.

☐ Less than 9<sup>th</sup> grade    ☐ Some college (no degree)  
☐ 9<sup>th</sup> – 12<sup>th</sup> grade, no diploma    ☐ Bachelor's degree  
☐ High school diploma (or GED/equivalent)    ☐ Graduate or professional degree  
☐ Associate Degree or Vocational Training    ☐ Other

**45.** What was your **total household income** last year, before taxes? (This includes everybody age 15 or older who lives in your house and has income.) Choose **only one (1)** answer.

- |   |   |   |
|---|---|---|
| <input type="checkbox"/> Less than \$20,000   | <input type="checkbox"/> \$40,000 to \$49,999 | <input type="checkbox"/> \$70,000 to \$79,999 |
| <input type="checkbox"/> \$20,000 to \$29,999 | <input type="checkbox"/> \$50,000 to \$59,999 | <input type="checkbox"/> \$80,000 to \$99,999 |
| <input type="checkbox"/> \$30,000 to \$39,999 | <input type="checkbox"/> \$60,000 to \$69,999 | <input type="checkbox"/> \$100,000 or more    |

**46.** What is your employment status? (Choose **as many** answers as you need to describe your situation.)

- |   |                                     |  |
|---|-------------------------------------|--|
| <input type="checkbox"/> Employed full-time | <input type="checkbox"/> Unemployed | <input type="checkbox"/> Homemaker     |
| <input type="checkbox"/> Employed part-time | <input type="checkbox"/> Disabled   | <input type="checkbox"/> Self-employed |
| <input type="checkbox"/> Retired            | <input type="checkbox"/> Student    |  |

**47.** Do you have any kind of medical health insurance coverage (private insurance, Medicaid, Medicare, insurance through the Affordable Care Act)?

- ☐ Yes ☐ No

**48.** Does your medical health insurance cover prescription drugs?

- ☐ Yes ☐ No ☐ I don't know

**49.** How do you typically access the internet?

- ☐ Desktop or laptop computer ☐ Smartphone ☐ Tablet ☐ Do not have a device with internet access

**Thank you very much for completing the Community Health Survey!**

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# 2022 PERSON COUNTY COMMUNITY HEALTH ASSESSMENT

PRESENTATION OF SUMMARY DATA FINDINGS: SECONDARY DATA & COMMUNITY HEALTH SURVEY RESULTS

Prepared by Public Health Consultant Annika Pfaender, October 2022

## PURPOSE OF THE COMMUNITY HEALTH ASSESSMENT

- Describe the health status of the community using:
  - Authoritative secondary data sources for demographic, socioeconomic, health, and environmental indicators.
  - Person Memorial Hospital data pertaining to emergency department discharges and inpatient discharges.
  - Community health survey of 600+ Person County residents conducted in Summer 2022.
  - Comparators North Carolina, Bladen County, and occasionally the US.
- Create a report that will serve as a resource for the Person County Health Department and other community organizations.
- Provide direction for the planning of disease prevention and health promotion services and activities.

## FLOW OF THE PRESENTATION

In service of the planning step of the CHA, the data gathered as part of the process will be summarized in this presentation format:

1. General Demographics
2. Health Status
3. Healthcare Resources
4. Economic Stability
5. Education Access & Quality
6. Social, Community & Environmental Context

We take special notice when:

- Person County statistics deviate from the comparators.
- Trend data shows significant changes over time.
- There are significant age, gender, or racial disparities.

## ABOUT THE PRESENTATION

- Person County data appears in blue in all charts and graphs; peer county Bladen is turquoise, and NC is always green.
- Trend lines and bars are labeled when those labels can be read clearly. Bladen is not graphed when it impedes visibility of the Person trend line.
- In maps, generated by the US Census Bureau, darker colors represent larger numbers or percentages.
- Responses to the Community Health Survey are woven into the presentation where applicable and appropriate.
- The statistics presented here are support by a robust data workbook displaying data on these indicators and many more. Sources include the NC State Center for Health Statistics, Division of Public Health, NC Department of Health and Human Services, the US Census Bureau, NC Office of State Budget and Management, NC Department of Commerce, NC Department of Public Instruction, Department of Public Safety, among others.



## NEXT STEPS

- This presentation will be distributed electronically to members of the CHA Team.
- The prioritization process required as part of the CHA will begin next week as led by LeighAnn Creson.
- The final list of priorities will be discussed further in the full Community Health Assessment report that will be made available in March 2023.

POPULATION

AGE

RACE

ETHNICITY

# GENERAL DEMOGRAPHICS

## POPULATION

According to the 2020 Census count Person County was home to 39,097 people, lower than the 2020 ACS estimate of 39,561 people. In 2022, the NC OSBM estimated 39,037 residents of the county.

The county was home to almost 1,500 more women than men in 2020.

The median age of 43.6 in 2020 was nearly 5 years older than the NC average (38.9).

The county population is expected to remain relatively unchanged over the next several decades, increasing to a projected 39,334 by 2050. The state of NC as a whole is expected to increase by about 10% over each of the next three decades.

In 2020, 4% of the county had moved there from another county, state, or country.

The birth rate has remained relatively steady at around 10.6 since 2009-2013. On average, 420 people are born each year in Person County.

Very little is available yet from the 2020 Census, so the bulk of the population-based statistics we will be discussing in this section come from the ACS (2020 and previous years).

Sources: 2020 ACS estimates, projections from NC OSBM, birth rate from NC SCHS

## BLACK, INDIGENOUS, AND PEOPLE OF COLOR

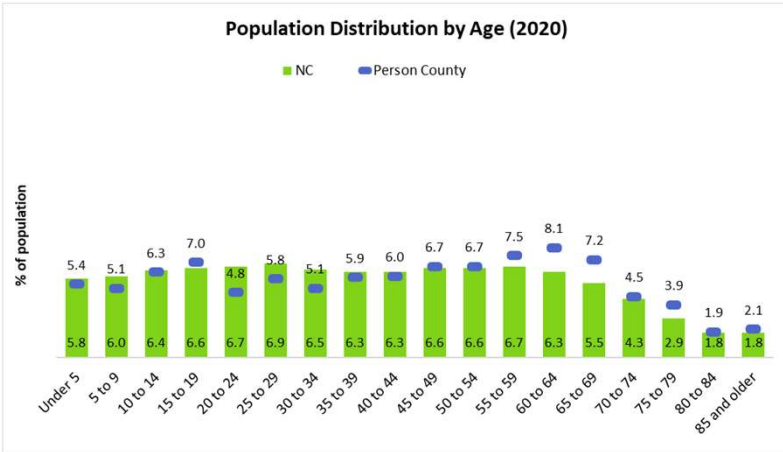
- Person County is similarly diverse to NC, with BIPOC residents comprising more than a quarter of the total county population.
- Compared to NC and Bladen County, Person County has a smaller Hispanic/Latino population.
- Person County is home to approximately 10,100 Black/African American residents and approximately 1,800 Hispanic/Latino residents.
  - The Hispanic/Latino population is significantly younger than the overall Person County population.

Racial Distribution	Percent of the Overall Population (2020 ACS Estimates)						
	White	Black	AI/AN	Asian	Other Race	Multiple Races	Hispanic/Latino
Person County	67.0	25.5	0.6	0.5	2.3	4.1	4.4
Bladen County	57.9	34.7	2.6	0.2	4.0	0.6	7.6
North Carolina	67.6	21.4	1.2	3.1	3.2	3.6	9.5

Note that the figures in a row are not additive. Hispanicity is an ethnic category that overlaps with other racial groups.

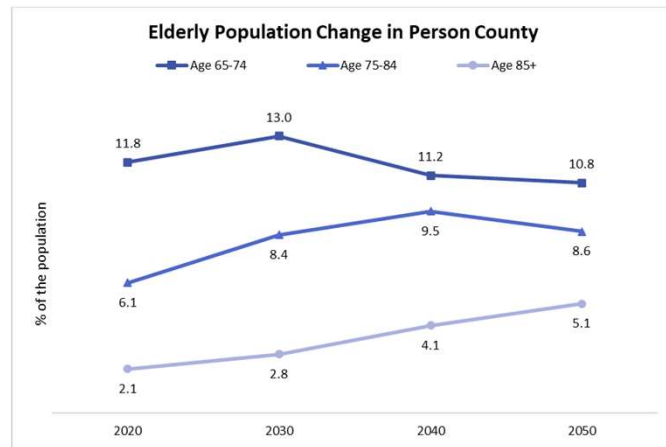
## AGE

- Compared to NC, Person County is comprised of a higher proportion of residents over the age of 50.
- Minors comprised approximately 20% of the population in 2020.
- Seniors (65 and older) also comprised 20% of the 2020 population.

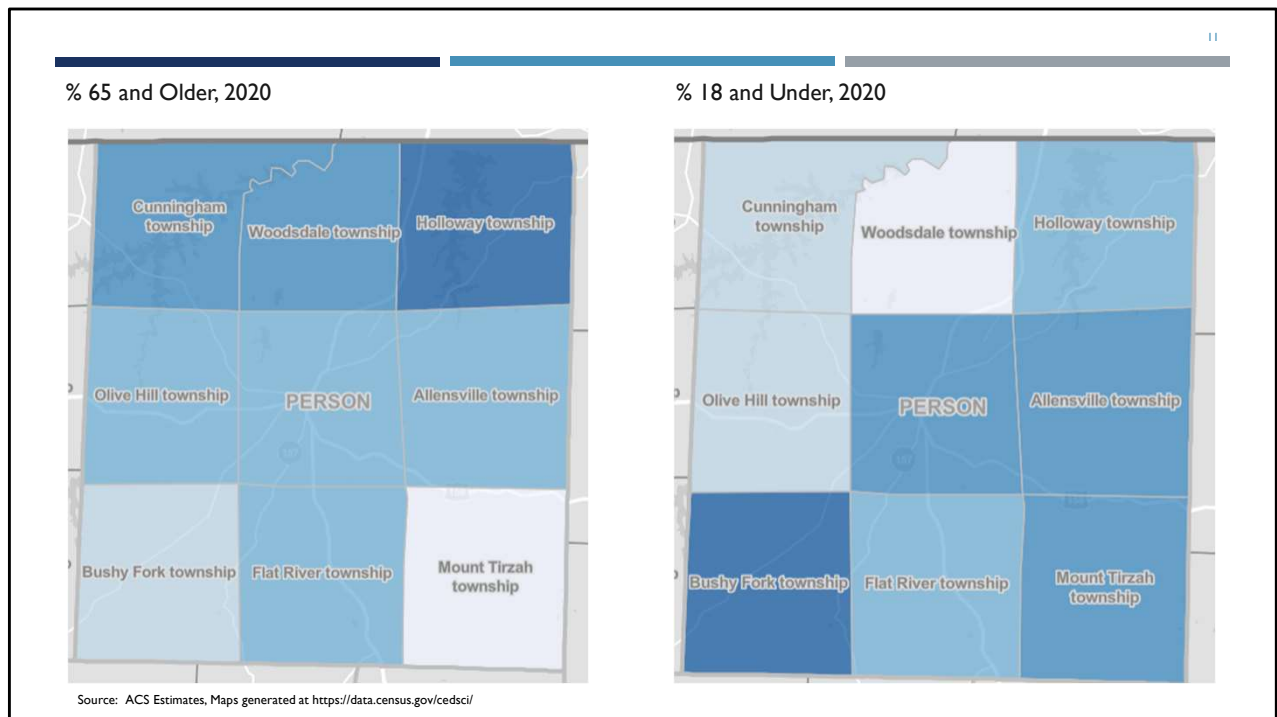


## ELDERLY POPULATION

- The population over the age of 65 is expected to increase by 23% over the next three decades, from approximately 7,800 in 2020 to a projected 9,650 by 2050.
  - Population aged 65-74 is projected to decrease by 8%.
  - Population aged 75-84 is projected to increase by 41%.
  - Population aged 85+ is projected to increase by 143%.



Source: NC OSBM

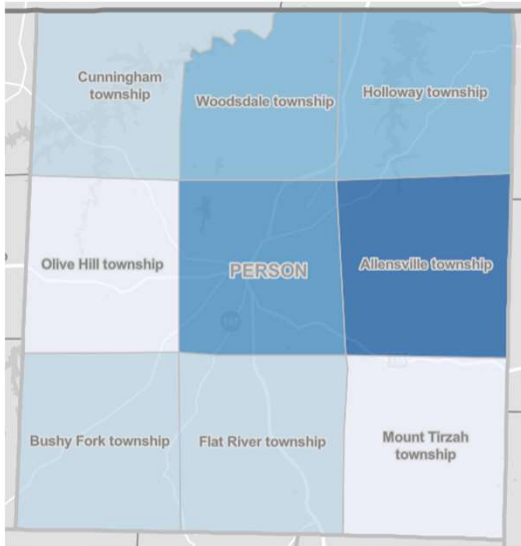


In these maps, the darker colors indicate higher numbers or percentages.

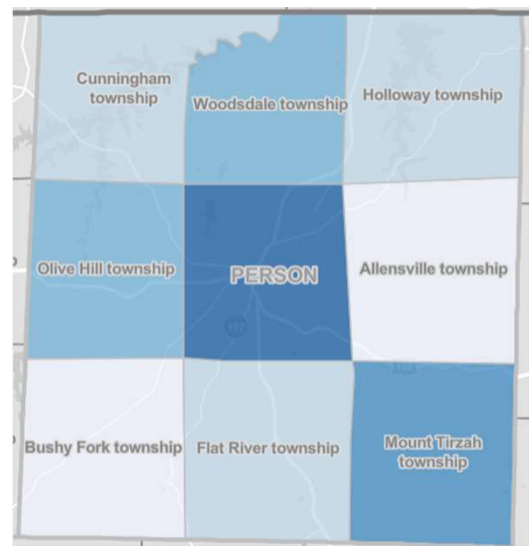
Roxboro (15,284) is by far the most populous township. Flat River is the second largest with 7,137 (2020).

Holloway (30%) is home to the highest proportion of elderly residents while Bushy Fork (28%) is home to the largest proportion of young residents.

% Black/African American, 2020



% Hispanic/Latino, 2020



Source: ACS Estimates, Maps generated at <https://data.census.gov/cedsci/>

In these maps, the darker colors indicate higher numbers or percentages.

Allensville (35%) and Roxboro (33%) townships have the highest proportion of Black/African American residents.

Roxboro (9%) and Mount Tirzah (7%) are home to the highest proportion of Hispanic/Latino residents.



## OTHER POPULATIONS OF NOTE

- Approximately 8% of the population (2,555 people) was a military veteran in 2020.
- Approximately 4% of the population was non-English speaking, with Spanish being the most common language spoken. As of 2020, among non-English speakers, less than 1% were considered linguistically isolated (speaks English less than “very well”).
- 20% of Person County residents had a disability in 2020, a higher proportion than Bladen County (18%) or NC (13%).
  - 10% have an ambulatory difficulty
  - 9% have a cognitive difficulty
  - 9% have an independent living difficulty
  - 4% have a hearing difficulty
  - 4% have a vision difficulty
  - 4% have a self-care difficulty

The disability % listed are out of the total Person County population.

Source: 2020 ACS Estimates

Hearing difficulty: deaf or having serious difficult hearing

Vision difficulty: blind or having serious difficulty seeing, even when wearing glasses

Cognitive difficulty: Because of a physical, mental, or emotional problem, having difficulty remembering, concentrating, or making decisions

Ambulatory difficulty: Having serious difficulty walking or climbing stairs

Self-care difficulty: Having difficulty bathing or dressing

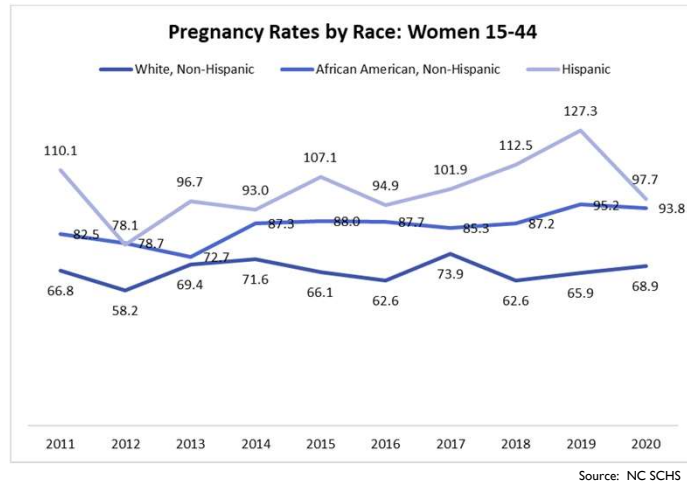
Independent living difficulty: Because of a physical, mental, or emotional problem, having difficulty doing errands alone such as visiting a doctor’s office or shopping

MATERNAL &  
INFANT HEALTH  
LIFE EXPECTANCY  
MORTALITY  
MORBIDITY

# HEALTH STATUS

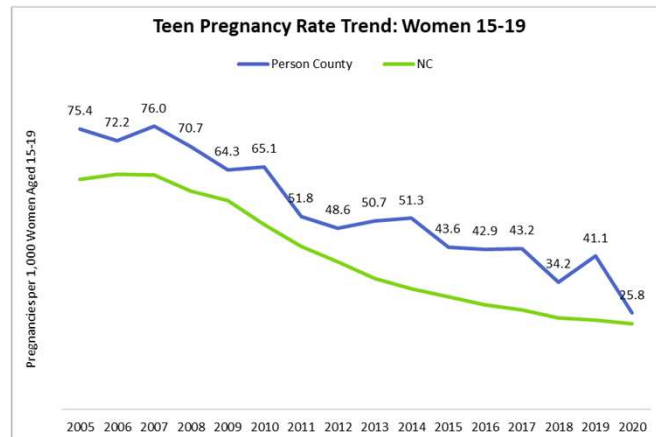
## PREGNANCY

- The pregnancy rate among women of childbearing age in Person County has increased from a low of 65.1 in 2012 to 78.2 in 2020 and has been higher compared to NC since 2013.
- The pregnancy rate among African American women has risen gradually over the past decade.
- The pregnancy rate among Hispanic women, typically the highest, decreased in 2020 after rising steadily for four years.



## PREGNANCY

- Among women aged 15-19, the pregnancy rate has decreased 64% since 2005 in Person County.
- However, the Person County teen pregnancy rate (25.8) remained higher compared to NC (22.9) in 2020.



Source: NC SCHS

Pregnancies among women 15-19 in 2020:

44 in Person

32 in Bladen

## PREGNANCY RISK FACTORS

### In 2020 Person County mothers were:

- more likely to have high parity births and short interval births
- more likely to have smoked during pregnancy
- less likely to have received prenatal care in the first trimester
- more likely to have delivered pre-term (less than 37 weeks gestation)
- similarly likely to have been diagnosed with gestational diabetes
- more likely to have a BMI in the Obese category
- similarly likely to deliver by C-section

**compared to NC in 2020.**

A high parity birth means that mother has had a large number of births for her age; short interval means conception occurred within 6 months of the last birth.

11.3% of Person births were to mothers who reported smoking during pregnancy in 2020, compared to less than 7% in NC and 12.5% in Bladen.

68.5% of Person mothers received prenatal care in the first trimester compared to 73.1% in NC in 2020.

7.5% of births were pre-term vs. 5.7 in NC and 13% in Bladen in 2020

6.0% with gestational diabetes vs 5.7% in NC

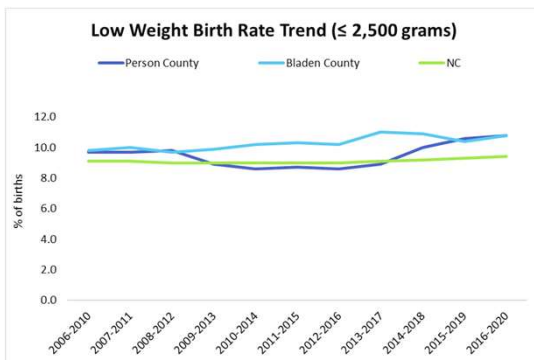
38% obese vs. 27% in NC

Person mothers tend to fare better than Bladen County mothers during pregnancy and delivery.

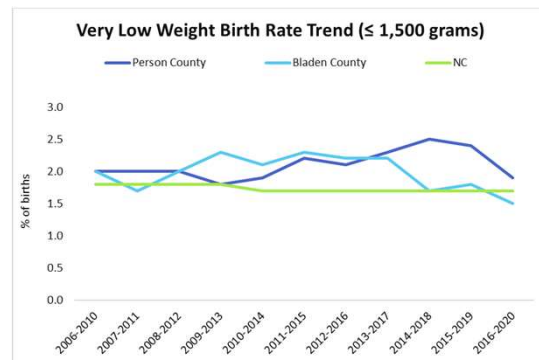
Source: NC SCHS

## PREGNANCY OUTCOMES

The percentage of births that are considered low weight (<5.5 pounds) have increased in Person County and remain higher compared to NC. Very low weight births (<3.3 pounds) have decreased but remain higher compared to NC and Bladen County.



Source: NC SCHS

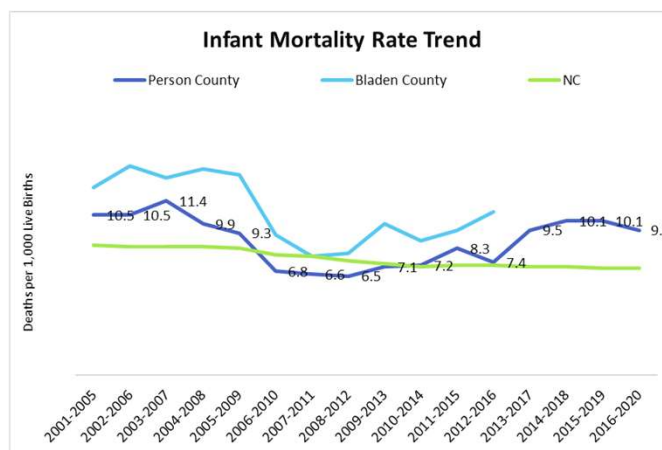


Source: NC SCHS

Low and very low weight births occur at higher rates among African American and Hispanic mothers in Person County, though some rates are based on low numbers.

## INFANT MORTALITY

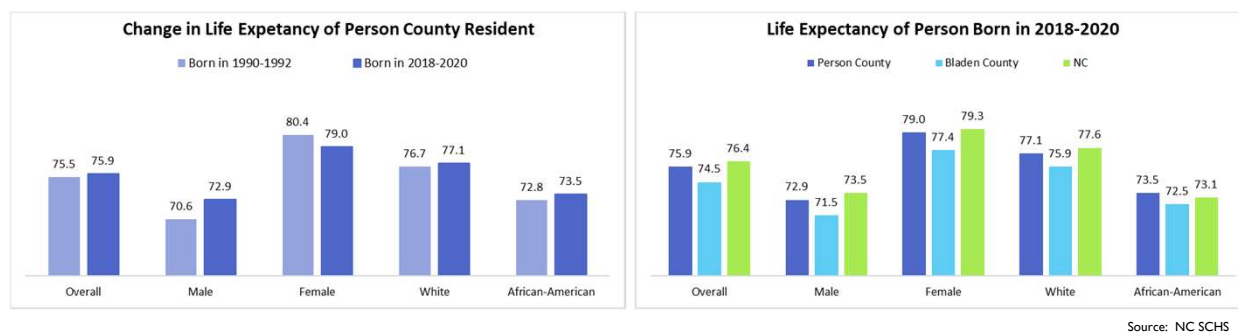
- The Person County infant mortality rate has been higher compared to NC since 2010-2014.
- The average number of infant deaths over the period shown was 19 per 5-year period.
- Most infant deaths in Person County occur among Black non-Hispanic residents.



Source: NC SCHS

## LIFE EXPECTANCY

- The average Person County resident born in 2018-2020 could be expected to live to the age of almost 76, about the same as a resident born in 1990-1992.
- Life expectancy increased among males, decreased among females, and did not change much for White and African Americans compared to 1990-1992.



Person County residents have similar life expectancies compared to NC and fare better compared to Bladen County residents.



## MORTALITY: LEADING CAUSES OF DEATH

2016-2020 Leading Causes of Death, in descending order	% change since 2001-2005	% change since last CHA	Difference from NC Rate in 2016-2020
Diseases of the Heart	-28%	3%	10%
Cancer	-21%	-12%	11%
All Other Unintentional Injuries	62%	85%	11%
Chronic Lower Respiratory Disease	-17%	14%	9%
Cerebrovascular Disease	-68%	-31%	-22%
Diabetes Mellitus	12%	-4%	25%
Alzheimer's Disease	70%	7%	-34%
Nephritis, Nephrotic Syndrome and Nephrosis	10%	58%	38%
Septicemia	20%	27%	60%
Suicide	-6%	13%	25%
Unintentional Motor Vehicle Injuries	-41%	-26%	8%
Pneumonia and Influenza	-52%	-41%	-20%
Chronic Liver Disease and Cirrhosis	6%	20%	12%
Homicide	n/a	n/a	n/a
Acquired Immune Deficiency Syndrome	n/a	n/a	n/a

Source: NC SCHS

Note that COVID-19 was added to the list of Leading Causes of Death in the 2016-2020 aggregate period but is not discussed here since there are no other years for comparison. Also note that due a delay in the publication of Vital Statistics for 2020, we don't have a mortality rate for Homicide and AIDS.

The last CHA was conducted in 2018 and included mortality rates from 2012-2016.

Red (positive number) indicates a rise in rates, green (negative number) indicates a decrease in the rate.

## MORTALITY: DISPARITIES

2016-2020 Leading Causes of Death, in descending order	Difference between Male and Female rates	Difference between African-American and White rates
Diseases of the Heart	75%	31%
Cancer	45%	11%
All Other Unintentional Injuries	110%	-37%
Chronic Lower Respiratory Disease	34%	--
Cerebrovascular Disease	20%	13%
Diabetes Mellitus	48%	181%
Alzheimer's Disease	--	59%
Nephritis, Nephrotic Syndrome, and Nephrosis	67%	240%
Septicemia	6%	--
Suicide	--	--
Unintentional Motor Vehicle Injuries	--	--
Pneumonia and Influenza	--	--
Chronic Liver Disease and Cirrhosis	--	--
COVID-19	--	--
Homicide	--	--
Acquired Immune Deficiency Syndrome	--	--

Source: NC SCHS

All available mortality rates for males were higher compared to females.

All available mortality rates, except for Unint. Injuries, were higher among African Americans compared to White rates.

Hospital Discharges of Person County Residents from Person Memorial Hospital	2016-2020	CY2019 through CY2021			
	# of deaths	Total ED Discharges	Average Yearly ED Discharges	Total IP Discharges	Average IP Discharges
Diseases of the Heart	478	988	329	308	103
Cancer	495	46	15	14	5
All Other Unintentional Injuries	107	9,218	3,073	71	24
Chronic Lower Respiratory Disease	134	1,061	354	101	34
Cerebrovascular Disease	93	116	39	33	11
Diabetes Mellitus	85	463	154	111	37
Alzheimer's Disease	68	10	3	0	0
Nephritis, Nephrotic Syndrome, and Nephrosis	63	154	51	96	32
Septicemia	54	381	127	338	113
Pneumonia and Influenza	35	799	266	102	34
Chronic Liver Disease and Cirrhosis	30	21	7	7	2
COVID-19	26	622	311	113	57
Acquired Immune Deficiency Syndrome	3	0	0	0	0

Source: data provided to Annika Pfaender, Public Health Consultant, from Person Memorial Hospital

ED/IP is All injuries regardless of intent and would include UMVI

## CANCER

2016-2020 Cancer Mortality Rate Trend	% change since 2001-2005	% change since last CHA	Difference from NC Rate in 2016-2020
Cancer	-21%	-12%	11%
Trachea, Bronchus, and Lung	-35%	-31%	-2%
Colon, Rectum and Anus	-12%	-12%	49%
Prostate	-59%	11%	-6%
Breast	-4%	-15%	-11%

2016-2020 Cancer Incidence Rate Trend	% change since 2001-2005	% change since last CHA	Difference from NC Rate in 2016-2020
Cancer	-2%	4%	5%
Trachea, Bronchus, and Lung	-11%	-13%	1%
Breast	20%	12%	8%
Prostate	-49%	7%	-15%
Colon, Rectum and Anus	-18%	-21%	5%

Source: NC SCHS

## MORBIDITY

As a general long-term trend, chlamydia and gonorrhea incidence rates are on the rise in Person County.

The prevalence of adult diabetes has decreased overall since 2004, though rates rose between 2017 and 2019. An estimated 8% of Person County adults (more than 3,000 people) have diabetes.

Although it has fluctuated up and down on a yearly basis, the estimated prevalence of adult obesity declined overall since 2006. Approximately 22% of Person County adults (nearly 7,000 people) would be considered obese.

According to 2018 estimates, 29% of 2 to 4-year-olds assessed by NC PedNESS were overweight (12%) or obese (17%), a slight decrease compared to the previous two years.

The number of patients with diabetes seen by Person Family Medical Center increased, from 524 in FY17-18 to 602 in FY20-21.

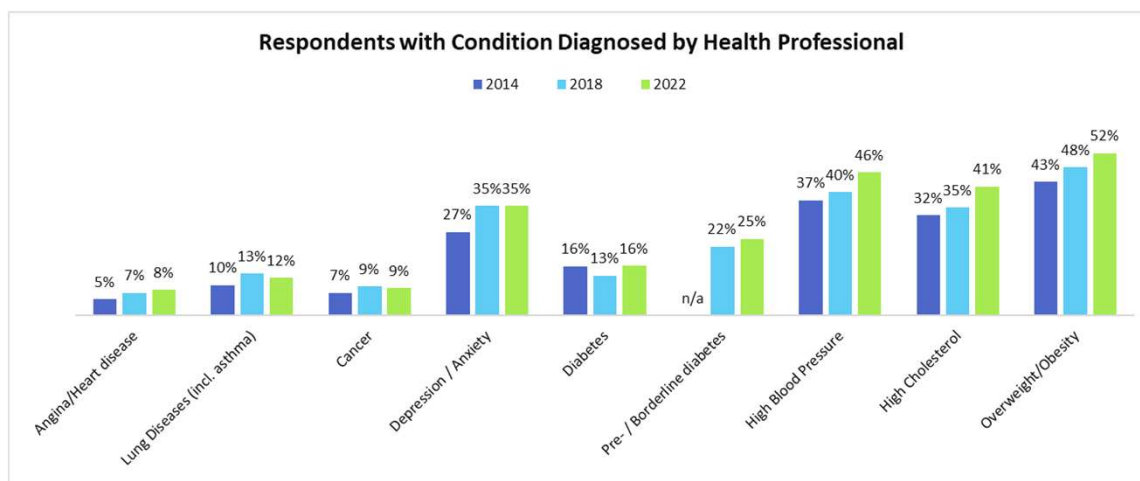
Among survey respondents, Diabetes ranked as the 3rd most important health problem (60%) and Obesity/Overweight ranked 6<sup>th</sup> (51%).

Incidence = newly reported cases

Prevalence = the number of people sick with something, not just those newly diagnosed

Sources: NC SCHS, DPH Communicable Diseases Branch, CDC for diabetes and obesity, youth obesity is from Eat Smart Move More NC

## SELF-REPORTED DIAGNOSES: COMMUNITY SURVEY RESPONSES



Note: the 2022 survey sample skews female, middle aged, white, educated, with an income over \$50,000 a year.

## MENTAL HEALTH

- An average of 1,424 Person County residents were served each year by the LME for Person County (Cardinal Innovations at the time, now Vaya) in SFY2016 through SFY2020.
- More than 1,150 individuals were discharged from the PMH emergency department for mental, behavioral and neurodevelopmental disorders in CY19-CY21, an average of 386 per year.
- In CY19-CY21, PMH saw 86 ED discharges due to suicidal ideation.
- According to data supplied by Person County EMS for FY19-FY22, emergency responders handled an average of 71 calls a year related to “psychiatric” issues.
- As noted earlier, the suicide mortality rate in Person County was 13% higher in 2016-2020 compared to the rate in 2012-2016.

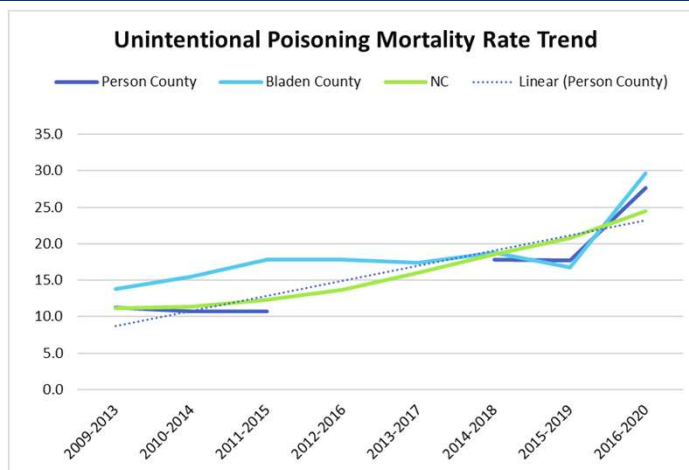
## MENTAL HEATH: COMMUNITY SURVEY RESPONSES

- Among 2022 Community Health Survey respondents:
  - 35% reported being diagnosed with depression or anxiety.
  - 61% felt Mental Health was a health problem having a great impact on the wellbeing of Person County residents.
  - 53% felt Substance Abuse was a critical health issue.
  - Drug Abuse (81%) and Alcohol Abuse (67%) were the most commonly identified impactful unhealthy behaviors.
  - The lack of counseling, mental health services and support groups was the second most commonly identified service issue in Person County (54%).



## UNINTENTIONAL POISONING DEATHS

- The unintentional poisoning mortality rate in Person County has risen steadily since it was first reported in 2009-2013.
- In 2016-2020, there were 50 deaths with an underlying cause of unintentional poisoning in Person County.



This is the closest we have to a standardized, comparable drug overdose mortality rate.

Note that rates were based on small numbers for several periods and were thus suppressed at the source.

## UNINTENTIONAL POISONINGS

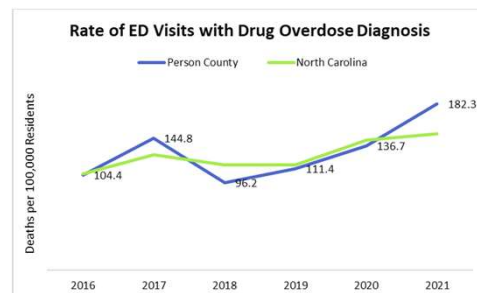
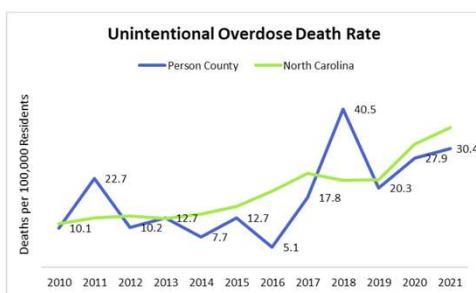
- According to data from the IVP Branch of NC DPH, between 2011 and 2020 among Person County residents, there were:
  - 63 unintentional poisoning-related deaths
  - 238 unintentional poisoning-related hospitalizations
  - 971 unintentional poisoning-related ED visits
  - Opioids were the most common substance contributing to these ED visits, hospitalizations, and deaths.
  - Stimulants and benzodiazepines were the other most contributing common substances.
- In CY2019-CY21, PMH had 183 ED discharges related to poisonings and adverse affects of drugs, medicaments and biological substances.
- Among the 418 PMH ED discharges related to substance use disorders, alcohol was the most common substance involved, followed by “other psychoactive substances”.

This is according to data provided by the Injury and Violence Prevention Branch of Department of Public Health, not data provided to the consultant by PMH. There may be more than one substance involved in a death.

“Other psychoactive substances” includes: caffeine, ecstasy, mescaline, psilocybin mushrooms, LSD

## OPIOIDS (NC OPIOID DASHBOARD)

- The rate of unintentional overdose deaths rose overall between 2016 and 2020.
- The rate of ED visits with a drug overdose diagnosis was higher in Person County in 2021 (182.3) compared to Bladen (140.6) and NC (149.9).
- The percentage of residents receiving prescribed opioid pills fell steadily from 25.3% in 2015 to 13.3% (5,266 patients) in 2021.
- An increasing proportion of overdose deaths in Person County, Bladen County, and across NC involved illicit opioids like heroin, fentanyl and fentanyl analogues.



I've been using the Opioid Dashboard since its inception; they continually change both the metrics they track and the definitions of those metrics, as well as the time frames they report. It's a unique tool and they've improved the way it's displayed. But honestly, I'd take it with a grain of salt.

## OPIOIDS (NC OPIOID DASHBOARD)

- Between 2015 and 2021, an average of 60% of children in foster care in Person County were there due to parental substance use, higher compared to Bladen County (34%) and NC (42%).
- Naloxone reversals by community members or law enforcement appear rare in Person County.
- The percentage of residents dispensed buprenorphine is higher compared to Bladen County and NC.
- The rate at which Medicaid beneficiaries and the uninsured are served by treatment providers for OUD is higher in Person County than in NC but has remained relatively level since 2016 while it has risen in NC and Bladen County.

I've been using the Opioid Dashboard since its inception; they continually change both the metrics they track and the definitions of those metrics, as well as the time frames they report. It's a unique tool and they've improved the way it's displayed. But honestly, I'd take it with a grain of salt.

## HEALTH BEHAVIORS: COMMUNITY SURVEY RESPONSES

- 11% reported smoking tobacco either every day (7.4%) or some days (3.9%).
- 7% reported current e-cigarette use: 3.3% every day and 3.5% some days.
- 3% reported using smokeless tobacco, either every day (1.2%) or some days (2.0%).
- 19% reported binge drinking at least one or two times in the past month.
- 48% reported getting the recommended amount of exercise in a normal week.
- 13% reported that they or someone they know used an illegal drug or misused a prescription drug.

Recommended exercise amount asked about: **150 minutes of moderate physical activity a week OR 75 minutes of vigorous physical activity**

HEALTH INSURANCE

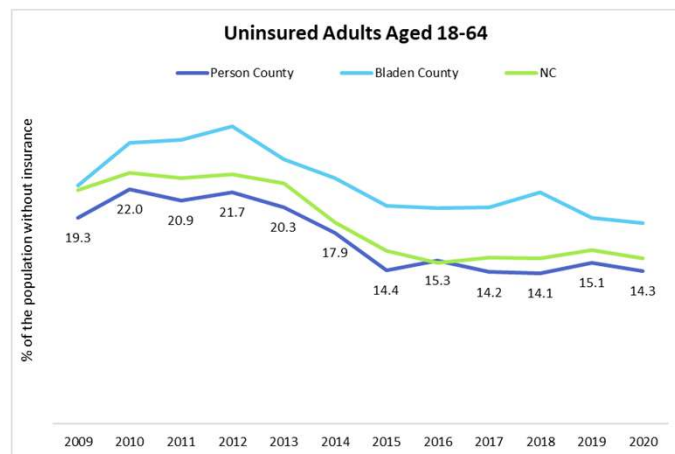
PROVIDERS &  
FACILITIES

UTILIZATION

# HEALTHCARE RESOURCES

## UNINSURED POPULATION

- The percentage of uninsured adults has fallen in Person County and it remains lower compared to NC.
- In 2020, an estimated 3,300 adults aged 18-64 were without health insurance.
- 6% of individuals under 18 were uninsured, compared to 5% in NC.
- 18% of ED discharges and 6.5% of IP discharges in CY19-CY21 were “self-pay”.



Source: US Census Bureau, SAHIE

## MEDICAID

### In SFY2021

- 10,700 residents, 27% of the Person County population, were Medicaid eligible.
  - As of September 2022, 11,300 individuals were enrolled in Medicaid.
- 1,233 children were enrolled in CHIP or MCHIP.
  - By September 2022, that number had increased to 1,268.
- The largest programs in Person County tend to be TANF (age 21 and under), Infants and Children, Family Planning, and Disabled.
- At PMH in CY19-CY21, an average of 28% of ED discharges and 10% of IP discharges, were patients on Medicaid.

Source: NC DHHS, Division of Health Benefits



## HEALTHCARE PROVIDERS

- Active, licensed providers practicing in Person County in 2021:
  - 34 physicians                      23% were over the age of 65.
  - 10 dentists                        40% were over the age of 65.
  - 39 pharmacists                  15% were over 65.
  - 169 registered nurses          <10% were older than 65.
  - 11 physician assistants and 21 nurse practitioners
- The provider-to-population ratios were lower for Person County (often by around half) compared to NC for the above four provider types. Meaning that in Person County there are fewer providers serving the population compared to NC as a whole.

It is exceedingly difficult to get an accurate count of medical providers.

Another way to think of the ratios is that each provider needs to see more people than the average NC provider.

Person	NC
RN= 42 : 10,000	vs. 99 : 10,000
DDS = 2.5 : 10,000	vs. 5 : 10,000
MD = 8 : 10,000	vs. 28 : 10,000
Pharm = 10 : 10,000	vs. 11 : 10,000
PA's = 3 : 10,000	vs. 7.5 : 10,000
NP's = 5 : 10,000	vs. 10 : 10,000

## LICENSED HEALTHCARE FACILITIES

Person Memorial Hospital: 38 Acute Care Beds, 60 nursing home beds.

1 dialysis facility: 37 stations and no shifts after 5pm (operated by Davita).

1 cardiac rehabilitation facility (operated by Duke LifePoint).

A total of 200 skilled nursing beds, 60 of those in PMH.

3 Adult Care Homes with 214 beds total and 8 Family Care Homes with 43 beds total.

6 agencies providing a variety of home health, home care, and hospice-related services.

31 mental health-related facilities; 4 of those facilities offer substance use disorder treatment services.

Person Family Medical and Dental Center, a FQHC, served 7,522 patients in 2021, an increase from 5,473 in 2020.

Various sources, including NC Division of Health Service Regulation

## HEALTHCARE UTILIZATION: COMMUNITY SURVEY RESPONSES

- Respondents to the Community Health Survey reported that, in the past year:
  - 84% had a routine physical or check-up.
  - 73% had been to the dentist or hygienist.
  - 94% had their blood pressure checked.
  - 82% had their cholesterol checked.
  - 24% indicated that there was a time when they needed medical care but could not get it. The most common reason cited was that it took too long to get an appointment (43%).
  - 17% reported a time when they could not get a medically necessary prescription, with inability to afford it cited as the primary reason (57%).
  - 23% said there was a time when they could not get needed dental care; "I couldn't afford it" was the most common reason (62%).
  - 22% said they didn't get needed medical care, 11% said they did not get needed dental care, and 4% said they didn't get a necessary prescription "because of COVID". COVID was not commonly cited as a reason respondents delayed preventive healthcare.

## HEALTHCARE ACCESS: COMMUNITY SURVEY RESPONSES

- The affordability of health services was identified as a service issue by 50% of survey respondents.
- 34% selected lack of/inadequate health insurance as an impactful service issue.
- Lack of senior living facilities was selected as a service issue by 27% of respondents.
- Lack of healthcare providers was identified as a service issue by 24% of respondents.
- 6% felt the lack of emergency services as a service issue.
- Not going to the doctor for preventive checkups was seen as an important unhealthy behavior by 49% of respondents.
- 7% felt not going to the dentist for checkups was an impactful unhealthy behavior
- 6% selected not getting immunizations as an important unhealthy behavior

INCOME

EMPLOYMENT

POVERTY

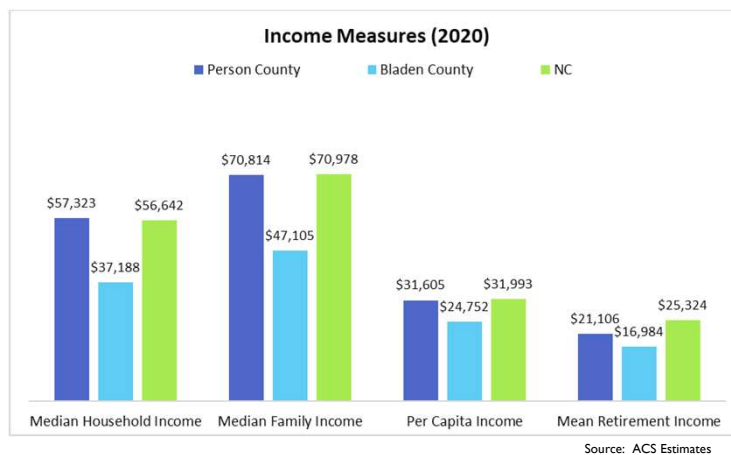
HOUSING

FOOD INSECURITY

# ECONOMIC STABILITY

## INCOME

- Compared to Bladen County, Person County residents had higher incomes across all four measures presented.
- Median family and household incomes increased by more than \$15,000 between 2015 and 2020. Per Capita income increased by \$10,000. Mean retirement income increased by \$4,400.



Household income describes all people aged 15 and older living in the same housing unit regardless of relationship (e.g. roommates are a household)

Family income describes all related (through bloodline or marriage) people aged 15 and older living in the same housing unit.

## EMPLOYMENT

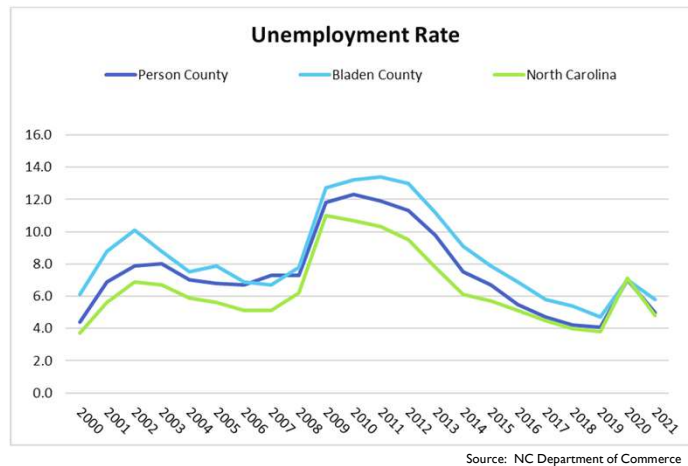
- Largest employment sectors in Person County in 2021:
 

○ Retail Trade	18%	\$533 average weekly wage	(\$147 less than the NC average)
○ Manufacturing	15%	\$1,131 average weekly wage	(\$136 less than the NC average)
○ Health Care & Social Assistance	12%	\$963 average weekly wage	(\$172 less than the NC average)
○ Educational Services	10%	\$938 average weekly wage	(\$92 less than the NC average)
  
- The average weekly wage across all sectors in Person County was \$930, \$352 less than the NC average of \$1,282.
- The highest average weekly wage in Person County was Utilities (\$2,152) and the lowest was Arts, Entertainment & Recreation (\$255).

Source: NC Department of Commerce

## UNEMPLOYMENT

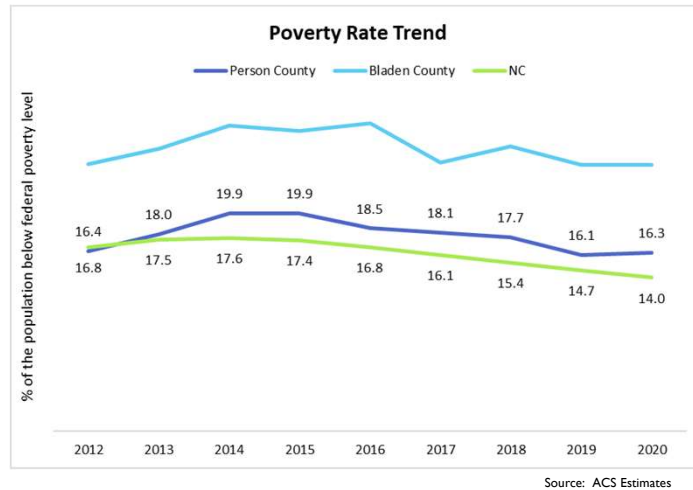
- The unemployment rate in Person County follows a similar trend to Bladen County and NC.
- The Person County unemployment rate increased from 4.1 in 2019 to 7.0 in 2020, likely due to COVID.
- As of June 2022, the unemployment rate in Person County and NC was 4.1.





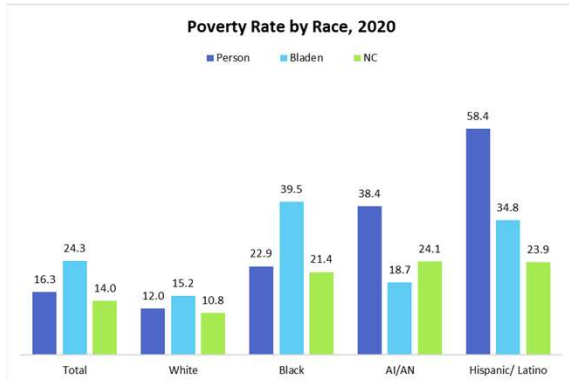
## POVERTY

- Although the poverty rate in Person County is lower than it was in 2015 it remains higher compared to NC.
- In 2020, an estimated 6,300 Person County residents lived below the federal poverty level (\$26,200 for a 4-person family/household).



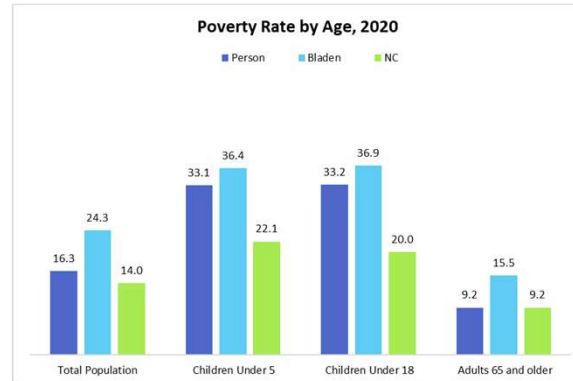
## POVERTY

BIPOC residents, especially Hispanic/Latino people, are more likely to live in poverty compared to white residents.



Source: ACS Estimate

Children are more likely to live in poverty compared to the total population and seniors.



Source: ACS Estimate

## HOUSING

According to 2020 estimates, 78% of Person County housing units were owned and 22% were rented units. 13% of housing units were vacant.

In 2020 the average gross rent was \$709 per month, higher than it was in 2010 (\$620) but still lower than the NC average of \$932.

Among rented units in 2020, 56% cost more than 30% of the renter's monthly income. Statewide, the figure is 47%.

The average monthly mortgage cost has also risen in Person County, from \$1,070 in 2010 to \$1,143 in 2020. The average mortgage cost in NC was \$1,328 in 2020.

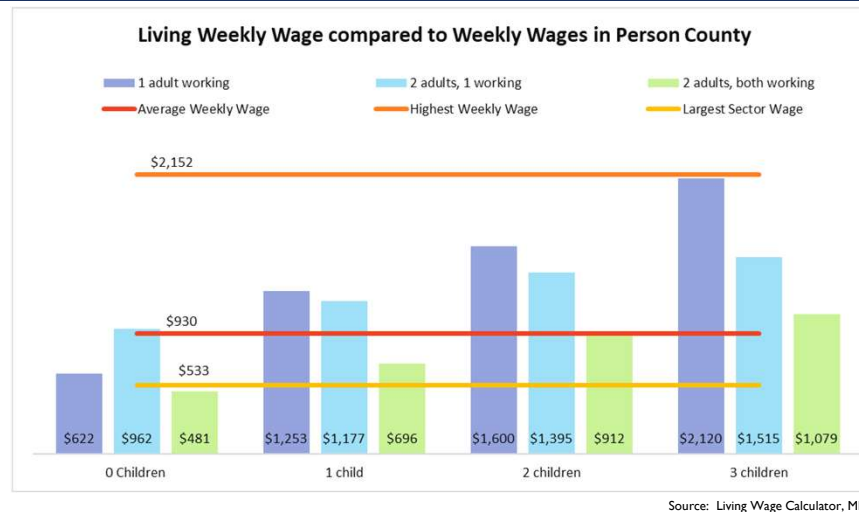
Among owned units, 24% cost more than 30% of the owner's monthly income (compared to 24% in NC), a decrease from 34% in 2016.

Source: ACS Estimates

It's worth noting that these figures likely do not reflect the recent and sometimes dramatic increases in housing and rental costs.

Compared to NC, Person County has more owners and fewer renters. Bladen has a vacancy rate of 26% in 2020.

## LIVING WAGE



MIT has produced a Living Wage Calculator. "The living wage is the minimum income standard that, if met, draws a very fine line between the financial independence of the working poor and the need to seek out public assistance or suffer consistent and severe housing and food insecurity. In light of this fact, the living wage is perhaps better defined as a minimum subsistence wage for persons living in the United States."

The bars in the chart represent the estimated living wage for Person County, based on the number of adults bringing in income and the number of children in the family. So, looking at the first three bars, the blue bar indicated that one working adult with no children to support would need to make \$622 a week to earn what would be considered a living wage. Then in turquoise, if there are two adults in a household, one of them working and with no children to support, that working adult would need to earn \$962 a week to earn a living wage. And in green is a household with two working adults and no children, each adult would need to earn \$481 to hit the living wage threshold.

The red line in the chart represents the average weekly wage earned by Person County employees in 2021: \$930. The orange line is the highest weekly wage (earned by the 3% who are in the utilities sector): \$2,152

The largest employment sector, Manufacturing, has a weekly wage of \$829 which was similar enough to the average wage that I decided not to graph it.

## COST OF LIVING (BASED ON 2020 DATA)

To achieve a modest, adequate standard of living and pay for housing, food, childcare, transportation, health care, other necessities, and taxes, Person County individuals and families would need to earn:

Person County	Monthly Total	Annual Total
1 adult, no children	\$2,881	\$34,569
1 adult, 1 child	\$4,247	\$50,969
1 adult, 2 children	\$5,139	\$61,670
1 adult, 3 children	\$6,243	\$74,921
2 adults, no children	\$3,752	\$45,026
2 adults, 1 child	\$5,186	\$62,231
2 adults, 2 children	\$6,014	\$72,170
2 adults, 3 children	\$7,069	\$84,828

Average monthly income (2021) = \$3,720  
(based on average weekly wage)

Average annual income (2021) = \$48,360  
(based on average hourly wage for 2080 hours per year)

Median Family Income (2020) = \$70,814  
(The average family size was 3 in 2020)

Median Household Income (2020) = \$57,323

Source: Family Budget Calculator from the Economic Policy Institute.

<https://www.epi.org/resources/budget/>

Income data from NC Dept of Commerce and ACS Estimates.

The source does a lot of fiddling (though methodical and thorough and they can explain why they did what they did) and combining of data and looking at percentiles and making some assumptions. And at this point it doesn't take inflation into consideration.

## FOOD INSECURITY

- In SY19-20 (the last year for which data is available) 71% of Person County Schools students were determined to be needy and qualified for free- or reduced-cost school meals.
- As of January 2022, nearly 4,000 households comprised of more than 7,600 individuals (36.5% of them under the age of 18) were receiving Food and Nutrition Services.
- Feeding America estimates that approximately 14% of the Person County population was food insecure in 2020; the rate is higher among children, 24% of whom were estimated to be food insecure in 2020.
- Compared to NC, Person County demonstrates higher proportions of food insecurity (both overall and among children) but lower proportions compared to Bladen County.

Food insecurity refers to [USDA's measure](#) of lack of access, at times, to enough food for an active, healthy life for all household members and limited or uncertain availability of nutritionally adequate foods. Food insecure children are those children living in households experiencing food insecurity. Food insecure households are not necessarily food insecure all the time. Food insecurity may reflect a household's need to make trade-offs between important basic needs, such as housing or medical bills, and purchasing nutritionally adequate foods.

Sources: Department of Public Instruction; DSS Management Assistance/UNC-CH School of Social Work

## SOCIAL AND SERVICE ISSUES: COMMUNITY SURVEY RESPONSES

- Low income/poverty ranked 1<sup>st</sup> on the list of Social Issues that had the greatest impact on quality of life in Person County, as identified by 78% of respondents.
- Unemployment/Underemployment ranked 3<sup>rd</sup>, with 57% of respondents choosing it.
- 28% identified homelessness as an important social issue, a notable increase from 10% in 2018.
- The affordability of housing ranked 1<sup>st</sup> among the list of service issues that had the greatest impact on Person County. 58% people selected it in 2022, compared to 24% in 2018.
- The lack of emergency housing shelters was selected by 31% of respondents.

EDUCATIONAL  
ATTAINMENT

LITERACY

EARLY CHILDHOOD

SCHOOLS

# EDUCATION ACCESS & QUALITY



## EDUCATIONAL ATTAINMENT

12% of the Person County population over the age of 25 has less than a high school education, the same compared to NC in 2020.

36% graduated from high school (or equivalency) and sought no further education, compared to 26% across NC in 2020.

16% of the population has a bachelor's degree or higher, compared to 32% in NC.

The high school drop-out rate decreased from a high of 5.20 in SY14-15 to 1.66 in SY20-21. In SY20-21, 22 students dropped out of high school.

81% of Person County high school seniors graduating in SY2021-22 did so on time or earlier: graduation rates are highest among AG students (>95%) and lowest among those of two or more races (68%).

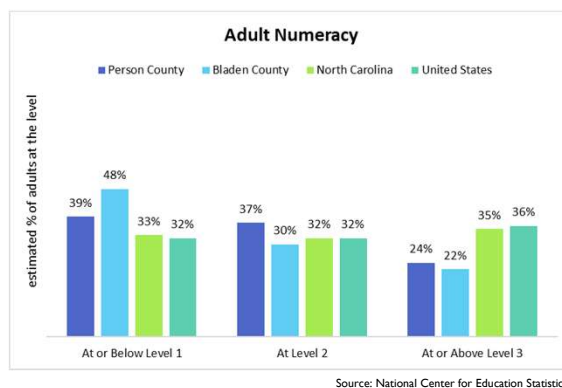
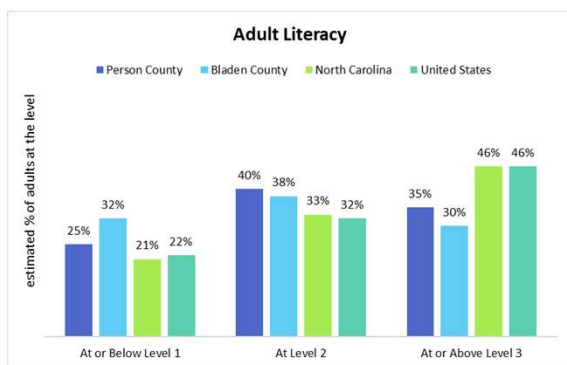
Bladen County demonstrate similar educational attainment, with a slightly higher proportion of bachelor's degree or higher.

Note that SY19-20 through SY20-21 numbers were likely impacted by COVID. In SY18-19, there were 39 HS drop-outs.

Graduation rates were lower among females (79%) than males (73%) in SY2021-22. In my experience, the opposite is usually true.

## ADULT LITERACY AND NUMERACY

According to estimates from the National Center for Education Statistics, 25% of Person County adults are at or below the lowest level of literacy and 39% are at or below the lowest level of numeracy.



Data is from the Program for the International Assessment of Adult Competencies (based on 2021, 2014 and 2017 surveys) at the National Center for Education Statistics.

### LITERACY

Below level 1 requires only basic vocabulary knowledge, and the reader is not required to understand the structure of sentences or paragraphs. Can read brief continuous texts on familiar topics to locate a single piece of information without competing information and the requested information is identical to the information in the question or directive. Tasks below level 1 do not make use of any features specific to digital texts.

Level 1 requires the adult to read relatively short digital or print texts (continuous, non-continuous or mixed) to locate a single piece of information that is identical or synonymous with the information given in the question or directive. Little competing information is present. Knowledge in recognizing basic vocabulary to determine the meaning of sentences and paragraphs.

### NUMERACY

Below Level 1: requires simple processes of counting, sorting, performing basic arithmetic operations with whole numbers or money; recognize common spatial representations in concrete, familiar contexts with explicit mathematical content.

Level 1: basic mathematical processes in common concrete contexts, one step processing involve counting, sorting, basic arithmetic, simple percents, simple or common graphical or spatial representations.

## CAREGIVING

- As of July 2022, there were 19 licensed Child Care Centers in Person County with a total enrollment of 716 out of 1,333 licensed slots.
- 15 licensed Family Child Care Homes were operational as of July 2022, with 96 children enrolled out of 256 licensed slots. Family Care Homes are the only option in Person County for parents who need 2<sup>nd</sup> or 3<sup>rd</sup> shift childcare.
- According to 2020 estimates, 965 Grandparents in Person County live with their own grandchildren under the age of 18: 30% (nearly 300) are responsible for those grandchildren.
  - 71% are White and 29% are Black/African American
  - 56% are female
  - 38% are still in the labor force
  - 31% have a disability
  - 33% live below the poverty level
  - 47% have no parent of the grandchild(ren) present

Source: NC Division of Child Development, ACS Estimates

Responsible means they are financial responsible for the child(ren)'s basic needs: food, shelter, clothing, day care.

The availability of childcare was identified as a service issue by 36% of respondents.

## SCHOOLS

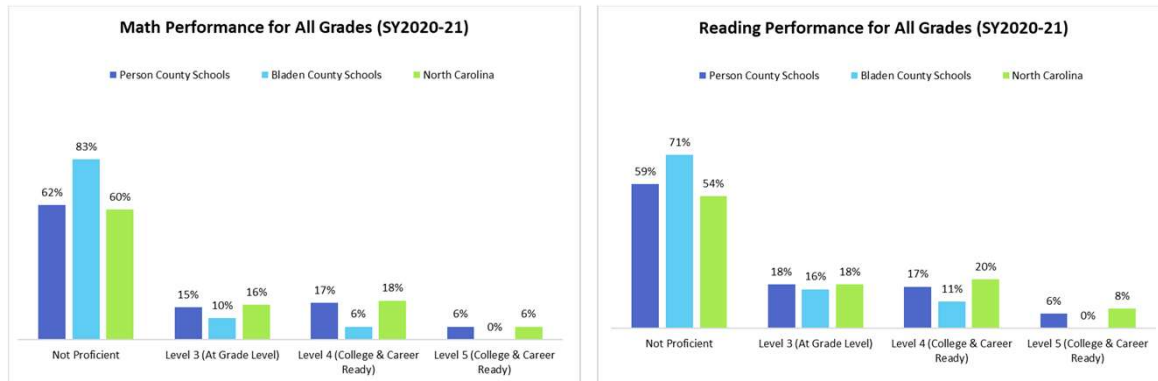
- There are 11 public schools in Person County: 7 elementary schools, 2 middle schools, 2 high schools
  - 4,407 students were enrolled in the SY20-21 school year; a decrease from 4,447 in SY18-19 which could be a result of the COVID-necessitated educational closures and changes.
- There are two charter schools in Person County, with 1,086 students enrolled in SY20-21.
- There are two religiously affiliated private schools in Person County, with approximately 110 students enrolled.
- The Person County School system is the largest employer in the county.
- In SY19-20, 71% of students enrolled in Person County Schools were determined to be needy.
- The average per pupil expenditure - \$10,907 – was higher in Person County in SY20-21 compared to NC (\$10,737) and lower compared to Bladen County (\$12,639) where outcomes tend to be worse.

End of Grade testing was not conducted in SY19-20 and results from SY20-21 are not yet publicly available; also the DPI decommissioned the source where EOG scores were reported. So we don't have a current or recent measure of student proficiency.

Expenditures are not reported for Charter Schools.

## EDUCATIONAL PROFICIENCY

Consider this data within the context of COVID and its impacts on the educational environment. But a majority of students at all grade levels in Person County, Bladen County and NC were not proficient in reading or math in SY20-21.



Sources: Department of Public Instruction, mostly the Report Cards

In Person County, females were more likely than males to be grade level proficient or above in math and reading.

Black students were more likely than other racial groups to be not-proficient in math and reading.

## SCHOOL DISCIPLINE AND SAFETY

- In SY2020-21, 56 students were given short-term suspensions, significantly lower compared to the previous years: 845 in SY18-19 and 425 in SY19-20.
- Long-term suspensions and expulsions are rare in Person County.
- The number of violent or criminal acts that occur on school property fluctuates on a yearly basis in Person County and was similar to the state rate in SY20-21.
- In SY19-20, 19 reportable acts were committed: possession of a controlled substance (13) and possession of a weapon (6). In SY20-21, 5 reportable acts were committed: possession of a controlled substance (3), assault on school personnel (1) and possession of a firearm (1).

Note that SY19-20 numbers were likely impacted by the COVID-related closure.

Short term = up to 10 days

Long term = 11 or more days

Sources: Department of Public Instruction

CRIME & VIOLENCE

TRANSPORTATION

VOTING

RECREATION

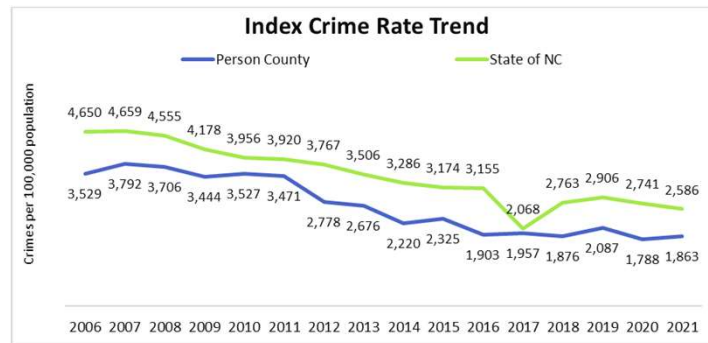
ENVIRONMENTAL  
QUALITY

# SOCIAL, ENVIRONMENTAL & COMMUNITY CONTEXT



## CRIME AND VIOLENCE

- The crime rate in Person County has fallen from a high point in 2007 and has remained lower compared to NC over the entire period presented below.
- In 2017, the most recent year for which county-level data is available, there were 128 violent crimes (aggravated assault was most common) and 650 property crimes (larceny was the most common).



Source: NC Dept of Public Safety

More detailed County-level crime data is really lagging at the source, the SBI. I think it has to do with the migration over to a national reporting system, which is not currently available to the public.

Larceny = theft of property without the use of force.

## CRIMINAL ACTIVITIES

- In 2017, the most recent year for which statistics are available, there were 191 arrests related to the sale/manufacture or possession of drugs in Person County.
  - 26% were related to the sale, manufacture or possession of opium or cocaine.
  - 61% were related to the sale, manufacture, or possession of marijuana.
- 119 arrests were made in 2017 for driving under the influence
- 100 registered sex offenders resided in Person County, as of August 30, 2022.
- Between 2005 and 2021, no clandestine methamphetamine lab busts occurred in Person County.

County-level crime data is really lagging at the source, the SBI. It's not clear why it hasn't been published since 2017; the site just says "not available at this time" and published state-level data.

Source: Dept of Public Safety: State Bureau of Investigation

## DOMESTIC VIOLENCE AND SEXUAL ASSAULT

- In FY20-21, 39 individuals filed domestic violence complaints with Safe Haven of Person County Inc., a notable decrease from more than 130 clients in FY18-19 and FY19-20.
  - Those clients were provided a wide range of services; the most frequent of which were information, advocacy, referrals, and “court”.
  - The local domestic violence shelter was full on 265 days of FY20-21.
- Between 2009 and 2020 there were 9 domestic violence-related homicides in Person County.
- In FY20-21, 5 individuals filed sexual assault complaints with Safe Haven of Person County Inc. 7 clients filed complaints in FY18-19 and FY19-20.
  - The majority of reported assaults were classified as rape and the most common type of offender was acquaintance.

Source: NC Council for Women, data submitted by grantees of the program: Safe Haven of Person County.

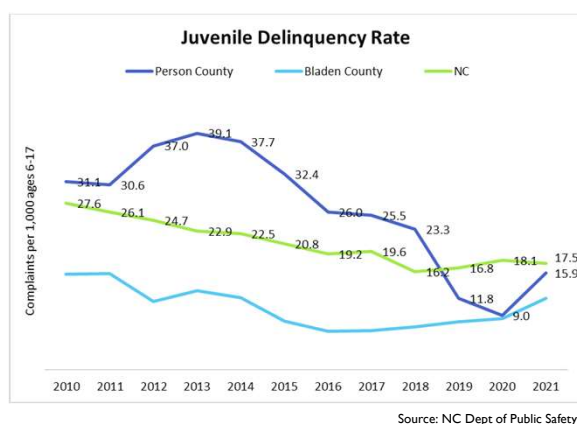
## CHILD ABUSE

- In FY20-21, 261 reports of child abuse or neglect were investigated, higher than the previous three fiscal years.
  - 12 (5% of investigated reports) were substantiated (lower than the previous three fiscal years): 4 were determined to be abuse and neglect, 2 were substantiated as abuse, 6 were substantiated as neglect.
  - 26 needed services, another 35 had services recommended.
  - 49 were unsubstantiated and 131 were not recommended services.
- Among the substantiated cases:
  - 50% were white
  - 75% were female
  - 75% were aged 13-17

DSS Management Assistance data portal from UNC-CH School of Social Work.

## JUVENILE JUSTICE

- The Person County juvenile delinquency rate was higher than NC between 2010-2018 but has since fallen below the comparable state rate.
- According to data provided by the local JCPC program, 46 juveniles were seen by court counselors as part of the intake process in FY20-21.
- Among the juveniles assessed in the last 6 months of 2020:
  - 48% had moderate or serious school behavior problems in the prior school year; more than 95% were functioning at grade-level.
  - 64% of the juveniles assessed had prior court referrals.
  - 64% had no known substance use.
  - 16% were involved in a gang.



Delinquent = Any juvenile between 6 and not yet 16 who commits an offense that would be a crime under state or local law if committed by an adult.

The most recent comparable data I have for Person is FY15-16, when 110 juveniles were seen at intake.

Local data source: JCPC Person County 2019-2020 Risk and Needs Assessment Data

## ADVERSE CHILDHOOD EXPERIENCES: COMMUNITY SURVEY RESPONSES

- Before the age of 18:
  - 23% lived with a depressed, mentally ill, or suicidal person
  - 28% lived with a problem drinker or alcoholic
  - 11% lived with a drug user
  - 6% lived with an incarcerated person
  - 26% had separated or divorced parents
  - 12% witnessed domestic violence at home more than once
  - 10% experienced physical abuse at home more than once
  - 27% experience verbal abuse at home more than once
  - 8% experienced sexual abuse at home more than once
  - 4% experienced sexual assault at home more than once

Total Number of ACEs	2022	
	#	%
No ACEs	266	43.9%
1 to 3 ACEs	240	39.6%
4 or more ACEs	100	16.5%
Total Responses	606	

This module was added to the survey in 2022, using the BRFSS version of the questions as a model.

Drug user = illegal street drugs or abused Rx medication

## ENVIRONMENT

- Person County ranked 7<sup>th</sup> out of 84 reporting counties in NC in 2020 for total pounds of toxic chemical releases.
  - 3.3 million pounds of toxic chemicals were disposed of by Person County releasers; Bladen County ranked first with nearly 5.4 millions pounds released.
  - The primary permitted releasers in Person County are Duke Energy and CPI USA.
- Approximately 30% of the county population is served by Community Water Systems, which are monitored for health-violations (there have been none in the past decade). But nearly more than two-thirds of the population gets their water from some other source.
- Person County disposed of more than 52,000 tons of trash in FY20-21, equating to a per-capita rate of 1.30, lower than NC (1.32) and higher than the county rate in FY91-92 (0.80).
- Pollution was identified as an issue impacting quality of life in Person County by 14% of survey respondents.

Sources: EPA TRI Explorer, Safe Drinking Water Information System, NC Division of Waste Management

## HOUSING ADEQUACY

Among occupied housing units, both rented and owned, in 2020:

- 22% of were mobile homes. Allensville township had the highest proportion (38%).
- 20% had been built before 1959. Roxboro township had the highest proportion (30%).
- 1.2% had no telephone service. Cunningham township had the highest proportion (5%).
- 5% were heated with fuel oil, kerosene, coal, coke or other fuels. Allensville township had the highest proportion (14%).
- 0.1% lacked complete plumbing or kitchen facilities. Holloway township had the only unit without plumbing  
Flat River township had the only units without kitchen facilities.

Source: 2020 ACS Estimates

As noted earlier, housing was identified as in need of improvement by 21% of respondents, ranking 5<sup>th</sup> among 13 issues.

**Complete plumbing facilities:** Complete plumbing facilities include: (1) hot and cold piped water; (2) a flush toilet; and (3) a bathtub or shower. All three facilities must be located in the housing unit

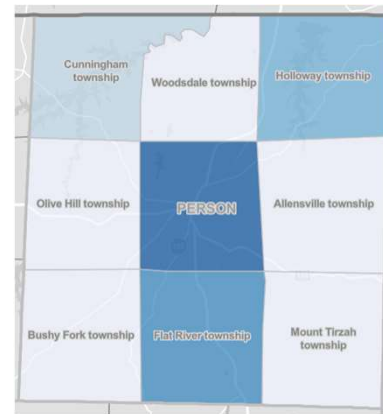
**Complete kitchen facilities:** A unit has complete kitchen facilities when it has all of the following facilities: (a) cooking facilities (b) refrigerator; and (c) a sink with piped water.



## INTERNET ACCESS

- According to 2020 estimates, 11% of Person County households have no computing device.
- 11% of households used a smartphone as their only type of computing device.
- 19% of households did not have an internet subscription.
- 9% used only their cellular data plan for internet access.
- Among households with a household income less than \$20,000, 50% did not have an internet subscription.
- The lack of high-speed internet was identified as a service issue by 47% of survey respondents.

% of Households with No Internet Access, 2020



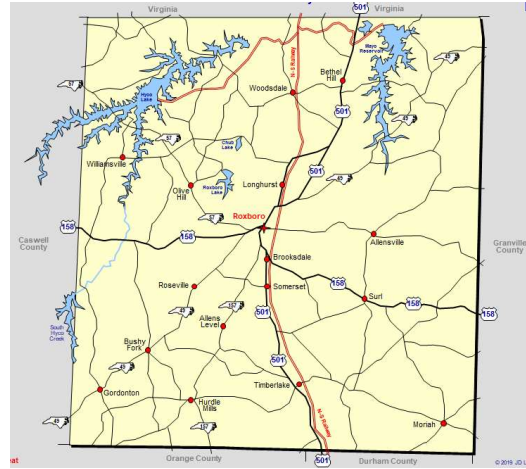
Source: ACS Estimate

In this map, the darker colors indicate higher percentages.

Among Community Health Survey respondents, only 1.5% reported having no internet access. 50% reported using a smartphone as their primary means of accessing the internet.

## TRANSPORTATION

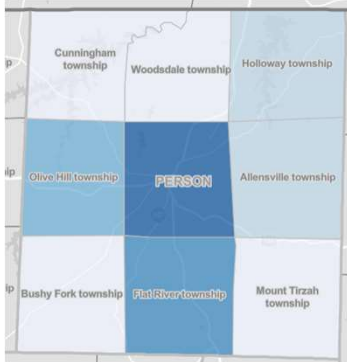
- 44% of workers aged 16 and older traveled outside of Person County for work in 2020; an additional 2.3% travel outside of NC for work.
  - 82% drove alone to work, 8% carpooled
  - 6% worked from home
  - 3% walked or used a taxi, motorcycle or other form of transportation
- The lack of transportation options was identified as an important service issue impacting quality of life in Person County by 30% of survey respondents in 2022.
- Unsafe, unmaintained roads were identified as an issue by 15% of respondents.



## VEHICLE AVAILABILITY

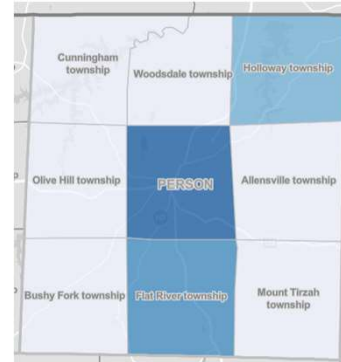
- According to 2020 ACS estimates, 5.2% (838) of Person County housing units had no vehicle available; rented units were more likely than owned units to have no vehicle available. Householders over age 65 were more likely to lack a vehicle.

Number of Owned Units with No Vehicle Available, 2020



Source: 2020 ACS Estimates

Number of Rented Units with No Vehicle Available, 2020



Source: 2020 ACS Estimates

The darker the colors on the maps, the higher the numbers.

## VOTING

As of August 2022, there were 27,581 registered voters in Person County:

36% registered Democrat

29% registered Republican

35% registered Unaffiliated

Males comprise 48% of the population and 43% of registered voters.

Black/African American residents comprise 26% of the population and 35% of registered voters.

79% of registered voters voted in the 2020 general election, higher than in Bladen County or NC as a whole (75%).

Source: NC State Board of Elections

**2022 PERSON COUNTY COMMUNITY HEALTH ASSESSMENT  
PRIORITY SETTING SURVEY**

**By taking this short survey you will learn what residents identified earlier this year (through a community health survey) as the leading health problems, unhealthy behaviors, social issues, and service issues in our county. You will also be informed about the leading causes of death for Person Co. according to the most recent state data. Your input will help us narrow down the top 2-3 health priorities for the county for the next 4 years. The Community Health Assessment Team (consisting of community volunteers, as well as representatives from Cooperative Extension, the Health Dept., Person Family Medical Center, PCC, Roxboro Housing Authority, Person Co. Schools, Person Memorial Hospital, Person Co. Partnership for Children, Long Memorial UMC, and Vaya Health) appreciates your input! If you would like to get involved in helping address the priorities identified, call (336) 597-2204 x2277.**

**You must be 18 or older to complete the survey. You must also live and/or work in Person County. PLEASE ANSWER ALL OF THE QUESTIONS. IT IS THE ONLY WAY WE CAN USE THE SURVEY. THANKS!**

\* 1. Are you 18 or older?

☐

Yes (go to the next question)

☐

No (please stop here)

\* 2. Do you live and/or work in Person County?

☐

Yes (go to the next question)

☐

No (please stop here)

\* 3. In a recent survey, Person County residents identified what they felt were the leading health problems in the county. Those problems are listed below alphabetically (instead of according to how they ranked). Please let us know which 5 you think should be the county's highest priorities to address. You must choose exactly 5 responses before you can move to the next question.

☐

Accidental injuries NOT involving vehicles

☐

Lung Disease

☐

Alzheimer's Disease

☐

Mental Health

☐

Cancer

☐

Obesity/Overweight

☐

Diabetes

☐

Pre/Borderline Diabetes

☐

Heart Disease/Heart Attack

☐

Stroke

☐

Infectious/Contagious Diseases

☐

Substance Abuse

☐

Kidney Disease

\* 4. The recent survey also identified what residents felt were the county's leading unhealthy behaviors. These behaviors are listed alphabetically (instead of how they ranked). Which 5 of these behaviors listed are of the most concern to you? You must choose exactly 5 responses before you can move to the next question.

- |   |  |
|---|--|
| <input type="checkbox"/> Alcohol abuse                                    | <input type="checkbox"/> Not going to the doctor for preventive check-ups/screenings |
| <input type="checkbox"/> Drug abuse                                       | <input type="checkbox"/> Poor eating habits  |
| <input type="checkbox"/> Having unsafe sex                                | <input type="checkbox"/> Reckless/drunk driving                                      |
| <input type="checkbox"/> Lack of exercise/poor physical fitness           | <input type="checkbox"/> Smoking/tobacco use   |
| <input type="checkbox"/> Lack of parenting skills                         | <input type="checkbox"/> Suicide   |
| <input type="checkbox"/> Not getting immunizations to prevent disease     | <input type="checkbox"/> Violent/angry behavior                                      |
| <input type="checkbox"/> Not going to the dentist for a check-up/cleaning |  |

\* 5. The survey also revealed social issues that were of concern to county residents. Those issues are listed below alphabetically (instead of how they ranked). Which 5 of these issues are of the most concern to you? You must choose exactly 5 responses before you can move to the next question.

- |   |   |
|---|---|
| <input type="checkbox"/> Animal control issues/rabies | <input type="checkbox"/> Neglect and abuse            |
| <input type="checkbox"/> Crime                        | <input type="checkbox"/> Pollution (air, water, land) |
| <input type="checkbox"/> Disaster preparedness        | <input type="checkbox"/> Racism/discrimination        |
| <input type="checkbox"/> Dropping out of school       | <input type="checkbox"/> Transportation options       |
| <input type="checkbox"/> Gang activity                | <input type="checkbox"/> Unemployment/underemployment |
| <input type="checkbox"/> Homelessness                 | <input type="checkbox"/> Unsafe schools               |
| <input type="checkbox"/> Low income/poverty           | <input type="checkbox"/> Unsafe/unmaintained roads    |

\* 6. The survey also revealed service issues that were of concern to county residents. Those issues are listed below alphabetically (instead of how they ranked). Which 5 of these issues are of the most concern to you? You must choose exactly 5 responses before you can move to the next question.

- |   |   |
|---|---|
| <input type="checkbox"/> Affordability of health services                         | <input type="checkbox"/> Lack of emergency housing (shelters) |
| <input type="checkbox"/> Affordability of housing                                 | <input type="checkbox"/> Lack of health care providers        |
| <input type="checkbox"/> Availability of child care                               | <input type="checkbox"/> Lack of/inadequate health insurance  |
| <input type="checkbox"/> Availability of healthy food choices                     | <input type="checkbox"/> Lack of recreational facilities      |
| <input type="checkbox"/> Lack of access to high speed internet                    | <input type="checkbox"/> Lack of senior living facilities     |
| <input type="checkbox"/> Lack of counseling/mental health services/support groups | <input type="checkbox"/> Lack of transportation options       |
| <input type="checkbox"/> Lack of culturally appropriate services for minorities   |   |

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\* 7. Listed here are Person County's leading causes of death for 2016-2020 according to the NC State Center for Health Statistics. They are listed alphabetically and not according to how they ranked ( i.e. #1 cause, #2 cause, etc.) Which 5 of these leading causes of death do you think should be of greatest concern and addressed in the county? You must choose exactly 5 responses before you can move to the next question.

- ☐ All Other Unintentional Injuries (death due to falls, burns, choking, animal bites, drowning, occupational or recreational injuries, suffocation, or poisoning - this may include but is not limited to drug overdose deaths)
- ☐ Alzheimer's Disease
- ☐ Cancer
- ☐ Chronic Liver Disease and Cirrhosis
- ☐ Chronic Lower Respiratory Disease (emphysema, chronic bronchitis, asthma)
- ☐ Diabetes
- ☐ Heart Disease
- ☐ Kidney Disease
- ☐ Pneumonia and Flu
- ☐ Septicemia (infection in the blood; sepsis)
- ☐ Stroke
- ☐ Suicide
- ☐ Unintentional Motor Vehicle Injury

\* 8. How do you describe yourself?

- ☐ Male ☐ Female ☐ Other

\* 9. How old are you?

- ☐ 18-19 ☐ 50-59 ☐ 80-85  
☐ 20-29 ☐ 60-64 ☐ 86 or older  
☐ 30-39 ☐ 65-69  
☐ 40-49 ☐ 70-79

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\* 10. Are you an . . .

- ☐ Elected Official ☐ Appointed Official ☐ Neither

\* 11. What do you consider your race? Please check only 1 answer.

- ☐ Asian (Indian, Pakistani, Japanese, Chinese, Korean, Vietnamese, Filipino/a) only
- ☐ Black/African American only
- ☐ Hispanic/Latino only
- ☐ Native American/American Indian/Alaska Native only
- ☐ Other race not listed here
- ☐ Pacific Islander (Native Hawaiian, Samoan, Guamanian/Chamorro) only
- ☐ Two or more races
- ☐ White only

\* 12. Are you of Hispanic, Latino, or Spanish origin?

- ☐ Yes
- ☐ No